

GRADING REPORT

COMPUTED BY: Neal McClatchey
 CHECKED BY: Jose Luna
 FEDERAL PROJECT NO: HPP/NH-28 (37)
 ROUTE NO. OR STREET: SR-28 (US-127)

SHEET 1 OF 1
 STATE NO.: 18008-3229-14
 PIN: 100260.04
 COUNTY: Cumberland

ESTIMATED GRADING QUANTITIES						
DESCRIPTION		UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)	BALANCE SUMMARY	
		EXC.	EMB.	EXC.	SHRINK = 15 % SWELL = 15 %	
MAINLINE		208705	185787	177400	EXC. 220244 VS. 26428 AVAILABLE = 26428	
SIDE ROADS		50405	22313	42845		
TOPSOIL (EMB.)					EXC. 220244 VS. 26428 AVAILABLE = 26428	
TOPSOIL (EXC.)		45489				
TOPSOIL TOTALS (SEE TOPSOIL TABLE)						
ROCK (C.Y.)		TOTALS (C.Y.)			WASTE MATERIAL = 30393	
EXC.	EMB.	EXC. (UNCL.)	EMB. (UNCL.)	EXC (COMMON)	EXC. (AVAIL.)	EXC. (ADJ.)
0	14284	304599	193816	304599	259110	220244
					BORROW ROCK = 16427	

Input File: ewkprj.inp

Output File: SR28Earth.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 500.000000
1 8 8
1 9 9 xs dgn = P:\2009 Projects\09-05-0201 -
SR-28\Transportation\CUSR028MainlineXSections.DGN
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = EARTH
1 13 13 roadway exc mult factor = 1.000000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 lc = 0
1 19 19 wt = 4
1 20 20 co = 2,8
1 21 21
1 22 22 Existing Ground Line
1 23 23 soil type = EARTH
1 24 24 roadway exc mult factor = 1.000000
1 25 25 subsoil exc mult factor = 1.000000
1 26 26 fill mult factor = 1.000000
1 27 27 type = line, line_string
1 28 28 lvname = SURVEY - GROUND - Top of Ground
1 29 29 lc = 3
1 30 30 wt = 2
1 31 31 co = 0
1 32 32
1 33 33 Existing Unsuitable Material
1 34 34 soil type = TOPSOIL
1 35 35 roadway exc mult factor = 1.000000
1 36 36 subsoil exc mult factor = 1.000000
1 37 37 fill mult factor = 1.000000
1 38 38 type = line, line_string
1 39 39 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 40 40 lc = 2
1 41 41 wt = 2
1 42 42 co = 2
1 43 43
1 44 44 Write Earthwork Shapes
1 45 45 plot param
1 46 46 lv = 347
1 47 47 lvname = DESIGN - EARTHWORK - Shapes
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1  48  48          co = 1
1  49  49          wt = 0
1  50  50          lc = 0
1  51  51          Stratify Shape Color
1  52  52
1  53  53          combine common exc + subgrade exc + subsoil exc
1  54  54
1  55  55
1  56  56          Add Accumulated Adjusted Volume Column
1  57  57
1  58  58          Add Accumulated Unadjusted Volume Column
1  59  59
1  60  60          End Area Decimal Places = 0
1  61  61
1  62  62          write column base ascii file = P:\2009 Projects\09-05-0201 -
SR-28\Transportation\Earthwork\SR28Earth.txt

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```

1  63  63
1  64  64          column 1 formula = abs( ["EARTH", Common Exc, End Area] )
1  65  65          column 1 number of decimal place = 0
1  66  66          column 1 total length = 10
1  67  67
1  68  68          column 2 formula = abs( ["EARTH", Fill, End Area] )
1  69  69          column 2 number of decimal place = 0
1  70  70          column 2 total length = 10
1  71  71
1  72  72
1  73  73          Process Earthwork for Baseline = MAINLINE
1  74  74          job number = 2f4
1  75  75
1  76  76          beg sta = 432+00.00 R 1
1  77  77          end sta = 606+60.00 R 2
0   0   78 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = MAINLINE

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

Station	Material Name	End Areas	Unadjusted Volumes	Adjusted Volumes	Mult Factor	Mass Ordinate	Accum Unadj
Vol	Adj Vol	(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu. yd.)

REGION = 1

432+00.00 EARTH

0	0	Excavation	0	0	0	1.00	
		Fill	251	0	0	1.00	0

0	0					
432+50.00 EARTH						
		Excavation	56	52	52	1.00
52	52					
		Fill	148	369	369	1.00 -317
369	369					
TOPSOIL						
		Excavation	25	23	23	1.00
23	23					
		Fill	0	0	0	1.00 -317
0	0					
Mass ordinate for TOPSOIL = 23						
433+00.00 EARTH						
		Excavation	68	115	115	1.00
167	167					
		Fill	47	181	181	1.00 -383
550	550					
TOPSOIL						
		Excavation	35	56	56	1.00
79	79					
		Fill	0	0	0	1.00 -383
0	0					
Mass ordinate for TOPSOIL = 79						
433+50.00 EARTH						
		Excavation	169	219	219	1.00
386	386					
		Fill	5	48	48	1.00 -212
598	598					
TOPSOIL						
		Excavation	52	81	81	1.00
160	160					
		Fill	0	0	0	1.00 -212
0	0					
Mass ordinate for TOPSOIL = 160						
434+00.00 EARTH						
		Excavation	259	396	396	1.00
782	782					
		Fill	0	5	5	1.00 179
603	603					
TOPSOIL						
		Excavation	64	107	107	1.00
267	267					
		Fill	0	0	0	1.00 179
0	0					
Mass ordinate for TOPSOIL = 267						

434+50.00 EARTH						
		Excavation	92	325	325	1.00
1107	1107					
		Fill	0	0	0	1.00 504
603	603					
		TOPSOIL				
		Excavation	33	90	90	1.00
357	357					
		Fill	0	0	0	1.00 504
0	0					
Mass ordinate for TOPSOIL = 357						

435+00.00 EARTH						
		Excavation	298	361	361	1.00
1468	1468					
		Fill	0	0	0	1.00 865
603	603					
		TOPSOIL				
		Excavation	64	90	90	1.00
447	447					
		Fill	0	0	0	1.00 865
0	0					
Mass ordinate for TOPSOIL = 447						

435+50.00 EARTH						
		Excavation	299	553	553	1.00
2021	2021					
		Fill	0	0	0	1.00 1418
603	603					
		TOPSOIL				
		Excavation	63	118	118	1.00
565	565					
		Fill	0	0	0	1.00 1418
0	0					
Mass ordinate for TOPSOIL = 565						

436+00.00 EARTH						
		Excavation	311	565	565	1.00
2586	2586					
		Fill	0	0	0	1.00 1983
603	603					
		TOPSOIL				
		Excavation	63	117	117	1.00
682	682					
		Fill	0	0	0	1.00 1983
0	0					
Mass ordinate for TOPSOIL = 682						

436+50.00 EARTH						
		Excavation	274	542	542	1.00

3128	3128						
		Fill	0	0	0	1.00	2525
603	603						
		TOPSOIL					
		Excavation	61	115	115	1.00	
797	797						
		Fill	0	0	0	1.00	2525
0	0						
		Mass ordinate for TOPSOIL = 797					

	437+00.00	EARTH					
		Excavation	220	457	457	1.00	
3585	3585						
		Fill	0	0	0	1.00	2982
603	603						
		TOPSOIL					
		Excavation	57	109	109	1.00	
906	906						
		Fill	0	0	0	1.00	2982
0	0						
		Mass ordinate for TOPSOIL = 906					

	437+50.00	EARTH					
		Excavation	90	287	287	1.00	
3872	3872						
		Fill	0	0	0	1.00	3269
603	603						
		TOPSOIL					
		Excavation	51	100	100	1.00	
1006	1006						
		Fill	0	0	0	1.00	3269
0	0						
		Mass ordinate for TOPSOIL = 1006					

	438+00.00	EARTH					
		Excavation	32	113	113	1.00	
3985	3985						
		Fill	1	1	1	1.00	3381
604	604						
		TOPSOIL					
		Excavation	41	85	85	1.00	
1091	1091						
		Fill	0	0	0	1.00	3381
0	0						
		Mass ordinate for TOPSOIL = 1091					

	438+50.00	EARTH					
		Excavation	10	39	39	1.00	
4024	4024						
		Fill	16	16	16	1.00	3404

620	620					
	TOPSOIL					
	Excavation	12	49	49	1.00	
1140	1140					
	Fill	0	0	0	1.00	3404
0	0					
	Mass ordinate for TOPSOIL = 1140					
439+00.00 EARTH						
	Excavation	6	15	15	1.00	
4039	4039					
	Fill	130	135	135	1.00	3284
755	755					
	TOPSOIL					
	Excavation	6	17	17	1.00	
1157	1157					
	Fill	0	0	0	1.00	3284
0	0					
	Mass ordinate for TOPSOIL = 1157					
439+50.00 EARTH						
	Excavation	0	6	6	1.00	
4045	4045					
	Fill	319	416	416	1.00	2874
1171	1171					
	TOPSOIL					
	Excavation	0	6	6	1.00	
1163	1163					
	Fill	0	0	0	1.00	2874
0	0					
	Mass ordinate for TOPSOIL = 1163					
440+00.00 EARTH						
	Excavation	0	0	0	1.00	
4045	4045					
	Fill	485	744	744	1.00	2130
1915	1915					
440+50.00 EARTH						
	Excavation	0	0	0	1.00	
4045	4045					
	Fill	501	913	913	1.00	1217
2828	2828					
441+00.00 EARTH						
	Excavation	0	0	0	1.00	
4045	4045					
	Fill	393	828	828	1.00	389
3656	3656					

441+50.00 EARTH							
		Excavation	0	0	0	1.00	
4045	4045						
		Fill	221	569	569	1.00	-180
4225	4225						
442+00.00 EARTH							
		Excavation	0	0	0	1.00	
4045	4045						
		Fill	188	379	379	1.00	-559
4604	4604						
TOPSOIL							
		Excavation	1	1	1	1.00	
1164	1164						
		Fill	0	0	0	1.00	-559
0	0						
Mass ordinate for TOPSOIL = 1164							
442+50.00 EARTH							
		Excavation	5	5	5	1.00	
4050	4050						
		Fill	84	252	252	1.00	-806
4856	4856						
TOPSOIL							
		Excavation	7	7	7	1.00	
1171	1171						
		Fill	0	0	0	1.00	-806
0	0						
Mass ordinate for TOPSOIL = 1171							
443+00.00 EARTH							
		Excavation	50	51	51	1.00	
4101	4101						
		Fill	0	78	78	1.00	-833
4934	4934						
TOPSOIL							
		Excavation	34	38	38	1.00	
1209	1209						
		Fill	0	0	0	1.00	-833
0	0						
Mass ordinate for TOPSOIL = 1209							
443+50.00 EARTH							
		Excavation	315	338	338	1.00	
4439	4439						
		Fill	0	0	0	1.00	-495
4934	4934						
TOPSOIL							
		Excavation	64	91	91	1.00	
1300	1300						

0	0	Fill	0	0	0	1.00	-495
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Mass ordinate for TOPSOIL = 1300

444+00.00 EARTH

5420	5420	Excavation	745	981	981	1.00	
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4934	4934	Fill	0	0	0	1.00	486
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TOPSOIL

1428	1428	Excavation	74	128	128	1.00	
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0	0	Fill	0	0	0	1.00	486
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Mass ordinate for TOPSOIL = 1428

444+50.00 EARTH

7007	7007	Excavation	969	1587	1587	1.00	
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4934	4934	Fill	0	0	0	1.00	2073
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TOPSOIL

1570	1570	Excavation	79	142	142	1.00	
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0	0	Fill	0	0	0	1.00	2073
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Mass ordinate for TOPSOIL = 1570

445+00.00 EARTH

8937	8937	Excavation	1115	1930	1930	1.00	
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4934	4934	Fill	0	0	0	1.00	4003
------	------	------	---	---	---	------	------

TOPSOIL

1720	1720	Excavation	83	150	150	1.00	
------	------	------------	----	-----	-----	------	--

0	0	Fill	0	0	0	1.00	4003
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Mass ordinate for TOPSOIL = 1720

445+50.00 EARTH

11026	11026	Excavation	1141	2089	2089	1.00	
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4934	4934	Fill	0	0	0	1.00	6092
------	------	------	---	---	---	------	------

TOPSOIL

1873	1873	Excavation	82	153	153	1.00	
------	------	------------	----	-----	-----	------	--

0	0	Fill	0	0	0	1.00	6092
---	---	------	---	---	---	------	------

Mass ordinate for TOPSOIL = 1873

446+00.00 EARTH

		Excavation	982	1966	1966	1.00	
12992	12992						
		Fill	0	0	0	1.00	8058
4934	4934						
		TOPSOIL					
		Excavation	80	150	150	1.00	
2023	2023						
		Fill	0	0	0	1.00	8058
0	0						

Mass ordinate for TOPSOIL = 2023

446+50.00 EARTH

		Excavation	797	1647	1647	1.00	
14639	14639						
		Fill	0	0	0	1.00	9705
4934	4934						
		TOPSOIL					
		Excavation	76	144	144	1.00	
2167	2167						
		Fill	0	0	0	1.00	9705
0	0						

Mass ordinate for TOPSOIL = 2167

447+00.00 EARTH

		Excavation	511	1211	1211	1.00	
15850	15850						
		Fill	0	0	0	1.00	10916
4934	4934						
		TOPSOIL					
		Excavation	70	135	135	1.00	
2302	2302						
		Fill	0	0	0	1.00	10916
0	0						

Mass ordinate for TOPSOIL = 2302

447+50.00 EARTH

		Excavation	340	788	788	1.00	
16638	16638						
		Fill	0	0	0	1.00	11704
4934	4934						
		TOPSOIL					
		Excavation	65	125	125	1.00	
2427	2427						
		Fill	0	0	0	1.00	11704
0	0						

Mass ordinate for TOPSOIL = 2427

448+00.00 EARTH						
	Excavation	192	493	493	1.00	
17131	17131					
	Fill	0	0	0	1.00	12197
4934	4934					
TOPSOIL						
	Excavation	60	116	116	1.00	
2543	2543					
	Fill	0	0	0	1.00	12197
0	0					

Mass ordinate for TOPSOIL = 2543

448+50.00 EARTH						
	Excavation	93	264	264	1.00	
17395	17395					
	Fill	0	0	0	1.00	12461
4934	4934					
TOPSOIL						
	Excavation	54	106	106	1.00	
2649	2649					
	Fill	0	0	0	1.00	12461
0	0					

Mass ordinate for TOPSOIL = 2649

449+00.00 EARTH						
	Excavation	23	107	107	1.00	
17502	17502					
	Fill	2	2	2	1.00	12566
4936	4936					
TOPSOIL						
	Excavation	31	79	79	1.00	
2728	2728					
	Fill	0	0	0	1.00	12566
0	0					

Mass ordinate for TOPSOIL = 2728

449+50.00 EARTH						
	Excavation	17	37	37	1.00	
17539	17539					
	Fill	16	17	17	1.00	12586
4953	4953					
TOPSOIL						
	Excavation	16	44	44	1.00	
2772	2772					
	Fill	0	0	0	1.00	12586
0	0					

Mass ordinate for TOPSOIL = 2772

450+00.00 EARTH						
	Excavation	17	31	31	1.00	

17570	17570						
		Fill	49	60	60	1.00	12557
5013	5013						
		TOPSOIL					
		Excavation	12	26	26	1.00	
2798	2798						
		Fill	0	0	0	1.00	12557
0	0						
		Mass ordinate for TOPSOIL = 2798					

		450+50.00 EARTH					
		Excavation	27	41	41	1.00	
17611	17611						
		Fill	92	131	131	1.00	12467
5144	5144						
		TOPSOIL					
		Excavation	16	26	26	1.00	
2824	2824						
		Fill	0	0	0	1.00	12467
0	0						
		Mass ordinate for TOPSOIL = 2824					

		451+00.00 EARTH					
		Excavation	11	35	35	1.00	
17646	17646						
		Fill	172	244	244	1.00	12258
5388	5388						
		TOPSOIL					
		Excavation	9	23	23	1.00	
2847	2847						
		Fill	0	0	0	1.00	12258
0	0						
		Mass ordinate for TOPSOIL = 2847					

		451+50.00 EARTH					
		Excavation	0	10	10	1.00	
17656	17656						
		Fill	317	453	453	1.00	11815
5841	5841						
		TOPSOIL					
		Excavation	2	10	10	1.00	
2857	2857						
		Fill	0	0	0	1.00	11815
0	0						
		Mass ordinate for TOPSOIL = 2857					

		452+00.00 EARTH					
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	493	750	750	1.00	11065

6591	6591						
	TOPSOIL						
	Excavation	0	2	2	1.00		
2859	2859						
	Fill	0	0	0	1.00	11065	
0	0						
	Mass ordinate for TOPSOIL = 2859						
452+50.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	616	1027	1027	1.00	10038	
7618	7618						
453+00.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	763	1277	1277	1.00	8761	
8895	8895						
453+50.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	373	1052	1052	1.00	7709	
9947	9947						
454+00.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	850	1132	1132	1.00	6577	
11079	11079						
454+50.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	888	1609	1609	1.00	4968	
12688	12688						
455+00.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	902	1657	1657	1.00	3311	
14345	14345						
455+50.00 EARTH							
	Excavation	0	0	0	1.00		
17656	17656						
	Fill	1067	1823	1823	1.00	1488	
16168	16168						

456+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1428	2310	2310	1.00	-822
18478	18478					
456+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1601	2805	2805	1.00	-3627
21283	21283					
457+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1533	2902	2902	1.00	-6529
24185	24185					
457+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1360	2679	2679	1.00	-9208
26864	26864					
458+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1460	2611	2611	1.00	-11819
29475	29475					
458+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1679	2906	2906	1.00	-14725
32381	32381					
459+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1574	3012	3012	1.00	-17737
35393	35393					
459+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	1599	2938	2938	1.00	-20675
38331	38331					
460+00.00 EARTH						
	Excavation	0	0	0	1.00	

17656	17656						
		Fill	1758	3108	3108	1.00	-23783
41439	41439						
460+50.00 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	1149	2692	2692	1.00	-26475
44131	44131						
460+72.95 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	1035	928	928	1.00	-27403
45059	45059						
461+00.00 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	1224	1132	1132	1.00	-28535
46191	46191						
461+50.00 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	1102	2154	2154	1.00	-30689
48345	48345						
462+00.00 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	1083	2023	2023	1.00	-32712
50368	50368						
462+39.61 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	989	1520	1520	1.00	-34232
51888	51888						
462+47.95 EARTH							
		Excavation	0	0	0	1.00	
17656	17656						
		Fill	969	302	302	1.00	-34534
52190	52190						
TOPSOIL							
		Excavation	0	0	0	1.00	
2859	2859						
		Fill	0	0	0	1.00	-34534
0	0						

Mass ordinate for TOPSOIL = 2859

462+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	964	74	74	1.00	-34608
52264	52264					
TOPSOIL						
	Excavation	0	0	0	1.00	
2859	2859					
	Fill	0	0	0	1.00	-34608
0	0					

Mass ordinate for TOPSOIL = 2859

463+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	951	1773	1773	1.00	-36381
54037	54037					
TOPSOIL						
	Excavation	0	0	0	1.00	
2859	2859					
	Fill	0	0	0	1.00	-36381
0	0					

Mass ordinate for TOPSOIL = 2859

463+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	891	1706	1706	1.00	-38087
55743	55743					

464+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	816	1581	1581	1.00	-39668
57324	57324					

464+25.81 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	760	753	753	1.00	-40421
58077	58077					

464+34.15 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	741	232	232	1.00	-40653
58309	58309					

464+50.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	705	425	425	1.00	-41078
58734	58734					

465+00.00 EARTH						
	Excavation	0	0	0	1.00	
17656	17656					
	Fill	552	1164	1164	1.00	-42242
59898	59898					

465+50.00 EARTH						
	Excavation	5	5	5	1.00	
17661	17661					
	Fill	361	845	845	1.00	-43082
60743	60743					
	TOPSOIL					
	Excavation	7	6	6	1.00	
2865	2865					
	Fill	0	0	0	1.00	-43082
0	0					
Mass ordinate for TOPSOIL = 2865						

466+00.00 EARTH						
	Excavation	32	34	34	1.00	
17695	17695					
	Fill	183	504	504	1.00	-43552
61247	61247					
	TOPSOIL					
	Excavation	14	19	19	1.00	
2884	2884					
	Fill	0	0	0	1.00	-43552
0	0					
Mass ordinate for TOPSOIL = 2884						

466+00.81 EARTH						
	Excavation	33	1	1	1.00	
17696	17696					
	Fill	179	5	5	1.00	-43556
61252	61252					
	TOPSOIL					
	Excavation	14	0	0	1.00	
2884	2884					
	Fill	0	0	0	1.00	-43556
0	0					
Mass ordinate for TOPSOIL = 2884						

466+50.00 EARTH						
	Excavation	99	120	120	1.00	

17816	17816						
		Fill	22	183	183	1.00	-43619
61435	61435						
		TOPSOIL					
		Excavation	33	43	43	1.00	
2927	2927						
		Fill	0	0	0	1.00	-43619
0	0						
		Mass ordinate for TOPSOIL = 2927					

		467+00.00 EARTH					
		Excavation	394	456	456	1.00	
18272	18272						
		Fill	0	20	20	1.00	-43183
61455	61455						
		TOPSOIL					
		Excavation	67	93	93	1.00	
3020	3020						
		Fill	0	0	0	1.00	-43183
0	0						
		Mass ordinate for TOPSOIL = 3020					

		467+50.00 EARTH					
		Excavation	770	1078	1078	1.00	
19350	19350						
		Fill	0	0	0	1.00	-42105
61455	61455						
		TOPSOIL					
		Excavation	75	131	131	1.00	
3151	3151						
		Fill	0	0	0	1.00	-42105
0	0						
		Mass ordinate for TOPSOIL = 3151					

		468+00.00 EARTH					
		Excavation	1009	1647	1647	1.00	
20997	20997						
		Fill	0	0	0	1.00	-40458
61455	61455						
		TOPSOIL					
		Excavation	83	146	146	1.00	
3297	3297						
		Fill	0	0	0	1.00	-40458
0	0						
		Mass ordinate for TOPSOIL = 3297					

		468+50.00 EARTH					
		Excavation	1090	1944	1944	1.00	
22941	22941						
		Fill	0	0	0	1.00	-38514

61455	61455					
	TOPSOIL					
	Excavation	85	156	156	1.00	
3453	3453					
	Fill	0	0	0	1.00	-38514
0	0					
	Mass ordinate for TOPSOIL = 3453					

469+00.00 EARTH						
	Excavation	1118	2044	2044	1.00	
24985	24985					
	Fill	0	0	0	1.00	-36470
61455	61455					
	TOPSOIL					
	Excavation	87	159	159	1.00	
3612	3612					
	Fill	0	0	0	1.00	-36470
0	0					
	Mass ordinate for TOPSOIL = 3612					

469+50.00 EARTH						
	Excavation	1099	2053	2053	1.00	
27038	27038					
	Fill	0	0	0	1.00	-34417
61455	61455					
	TOPSOIL					
	Excavation	87	161	161	1.00	
3773	3773					
	Fill	0	0	0	1.00	-34417
0	0					
	Mass ordinate for TOPSOIL = 3773					

470+00.00 EARTH						
	Excavation	827	1783	1783	1.00	
28821	28821					
	Fill	0	0	0	1.00	-32634
61455	61455					
	TOPSOIL					
	Excavation	85	159	159	1.00	
3932	3932					
	Fill	0	0	0	1.00	-32634
0	0					
	Mass ordinate for TOPSOIL = 3932					

470+50.00 EARTH						
	Excavation	422	1156	1156	1.00	
29977	29977					
	Fill	0	0	0	1.00	-31478
61455	61455					
	TOPSOIL					

		Excavation	79	152	152	1.00	
4084	4084						
		Fill	0	0	0	1.00	-31478
0	0						

Mass ordinate for TOPSOIL = 4084

471+00.00 EARTH							
		Excavation	64	450	450	1.00	
30427	30427						
		Fill	128	119	119	1.00	-31147
61574	61574						
TOPSOIL							
		Excavation	27	98	98	1.00	
4182	4182						
		Fill	0	0	0	1.00	-31147
0	0						

Mass ordinate for TOPSOIL = 4182

471+50.00 EARTH							
		Excavation	0	59	59	1.00	
30486	30486						
		Fill	489	571	571	1.00	-31659
62145	62145						
TOPSOIL							
		Excavation	0	25	25	1.00	
4207	4207						
		Fill	0	0	0	1.00	-31659
0	0						

Mass ordinate for TOPSOIL = 4207

472+00.00 EARTH							
		Excavation	0	0	0	1.00	
30486	30486						
		Fill	687	1089	1089	1.00	-32748
63234	63234						

472+50.00 EARTH							
		Excavation	0	0	0	1.00	
30486	30486						
		Fill	566	1160	1160	1.00	-33908
64394	64394						

473+00.00 EARTH							
		Excavation	3	3	3	1.00	
30489	30489						
		Fill	337	836	836	1.00	-34741
65230	65230						
TOPSOIL							
		Excavation	5	5	5	1.00	
4212	4212						

		Fill	0	0	0	1.00	-34741
0	0						
		Mass ordinate for TOPSOIL = 4212					
473+50.00 EARTH							
		Excavation	9	11	11	1.00	
30500	30500						
		Fill	114	418	418	1.00	-35148
65648	65648						
		TOPSOIL					
		Excavation	10	14	14	1.00	
4226	4226						
		Fill	0	0	0	1.00	-35148
0	0						
		Mass ordinate for TOPSOIL = 4226					
474+00.00 EARTH							
		Excavation	140	138	138	1.00	
30638	30638						
		Fill	0	106	106	1.00	-35116
65754	65754						
		TOPSOIL					
		Excavation	59	64	64	1.00	
4290	4290						
		Fill	0	0	0	1.00	-35116
0	0						
		Mass ordinate for TOPSOIL = 4290					
474+50.00 EARTH							
		Excavation	391	492	492	1.00	
31130	31130						
		Fill	0	0	0	1.00	-34624
65754	65754						
		TOPSOIL					
		Excavation	68	118	118	1.00	
4408	4408						
		Fill	0	0	0	1.00	-34624
0	0						
		Mass ordinate for TOPSOIL = 4408					
475+00.00 EARTH							
		Excavation	439	769	769	1.00	
31899	31899						
		Fill	0	0	0	1.00	-33855
65754	65754						
		TOPSOIL					
		Excavation	70	128	128	1.00	
4536	4536						
		Fill	0	0	0	1.00	-33855
0	0						

Mass ordinate for TOPSOIL = 4536

475+50.00 EARTH

		Excavation	194	586	586	1.00	
32485	32485						
		Fill	0	0	0	1.00	-33269
65754	65754						
		TOPSOIL					
		Excavation	60	120	120	1.00	
4656	4656						
		Fill	0	0	0	1.00	-33269
0	0						

Mass ordinate for TOPSOIL = 4656

475+88.81 EARTH

		Excavation	76	194	194	1.00	
32679	32679						
		Fill	52	37	37	1.00	-33112
65791	65791						
		TOPSOIL					
		Excavation	28	63	63	1.00	
4719	4719						
		Fill	0	0	0	1.00	-33112
0	0						

Mass ordinate for TOPSOIL = 4719

476+00.00 EARTH

		Excavation	71	30	30	1.00	
32709	32709						
		Fill	90	29	29	1.00	-33111
65820	65820						
		TOPSOIL					
		Excavation	20	10	10	1.00	
4729	4729						
		Fill	0	0	0	1.00	-33111
0	0						

Mass ordinate for TOPSOIL = 4729

476+50.00 EARTH

		Excavation	41	104	104	1.00	
32813	32813						
		Fill	330	389	389	1.00	-33396
66209	66209						
		TOPSOIL					
		Excavation	13	31	31	1.00	
4760	4760						
		Fill	0	0	0	1.00	-33396
0	0						

Mass ordinate for TOPSOIL = 4760

477+00.00 EARTH						
	Excavation	13	50	50	1.00	
32863	32863					
	Fill	722	974	974	1.00	-34320
67183	67183					
	TOPSOIL					
	Excavation	12	23	23	1.00	
4783	4783					
	Fill	0	0	0	1.00	-34320
0	0					

Mass ordinate for TOPSOIL = 4783

477+50.00 EARTH						
	Excavation	2	14	14	1.00	
32877	32877					
	Fill	749	1362	1362	1.00	-35668
68545	68545					
	TOPSOIL					
	Excavation	4	15	15	1.00	
4798	4798					
	Fill	0	0	0	1.00	-35668
0	0					

Mass ordinate for TOPSOIL = 4798

477+55.48 EARTH						
	Excavation	2	0	0	1.00	
32877	32877					
	Fill	750	152	152	1.00	-35820
68697	68697					
	TOPSOIL					
	Excavation	4	1	1	1.00	
4799	4799					
	Fill	0	0	0	1.00	-35820
0	0					

Mass ordinate for TOPSOIL = 4799

477+63.81 EARTH						
	Excavation	3	1	1	1.00	
32878	32878					
	Fill	752	232	232	1.00	-36051
68929	68929					
	TOPSOIL					
	Excavation	4	1	1	1.00	
4800	4800					
	Fill	0	0	0	1.00	-36051
0	0					

Mass ordinate for TOPSOIL = 4800

478+00.00 EARTH						
	Excavation	17	13	13	1.00	

32891	32891						
		Fill	685	963	963	1.00	-37001
69892	69892						
		TOPSOIL					
		Excavation	8	8	8	1.00	
4808	4808						
		Fill	0	0	0	1.00	-37001
0	0						
		Mass ordinate for TOPSOIL = 4808					

478+50.00 EARTH							
		Excavation	23	37	37	1.00	
32928	32928						
		Fill	731	1311	1311	1.00	-38275
71203	71203						
		TOPSOIL					
		Excavation	10	17	17	1.00	
4825	4825						
		Fill	0	0	0	1.00	-38275
0	0						
		Mass ordinate for TOPSOIL = 4825					

479+00.00 EARTH							
		Excavation	12	32	32	1.00	
32960	32960						
		Fill	748	1369	1369	1.00	-39612
72572	72572						
		TOPSOIL					
		Excavation	7	16	16	1.00	
4841	4841						
		Fill	0	0	0	1.00	-39612
0	0						
		Mass ordinate for TOPSOIL = 4841					

479+41.68 EARTH							
		Excavation	0	9	9	1.00	
32969	32969						
		Fill	753	1158	1158	1.00	-40761
73730	73730						
		TOPSOIL					
		Excavation	0	5	5	1.00	
4846	4846						
		Fill	0	0	0	1.00	-40761
0	0						
		Mass ordinate for TOPSOIL = 4846					

479+50.00 EARTH							
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	726	228	228	1.00	-40989

73958	73958						
	479+50.01	EARTH					
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	726	0	0	1.00	-40989
73958	73958						
	480+00.00	EARTH					
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	615	1241	1241	1.00	-42230
75199	75199						
	480+50.00	EARTH					
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	473	1007	1007	1.00	-43237
76206	76206						
	481+00.00	EARTH					
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	253	672	672	1.00	-43909
76878	76878						
		TOPSOIL					
		Excavation	0	0	0	1.00	
4846	4846						
		Fill	0	0	0	1.00	-43909
0	0						
		Mass ordinate for TOPSOIL = 4846					
	481+16.68	EARTH					
		Excavation	0	0	0	1.00	
32969	32969						
		Fill	173	132	132	1.00	-44041
77010	77010						
		TOPSOIL					
		Excavation	2	1	1	1.00	
4847	4847						
		Fill	0	0	0	1.00	-44041
0	0						
		Mass ordinate for TOPSOIL = 4847					
	481+50.00	EARTH					
		Excavation	14	9	9	1.00	
32978	32978						
		Fill	58	143	143	1.00	-44175
77153	77153						
		TOPSOIL					

		Excavation	14	10	10	1.00	
4857	4857						
		Fill	0	0	0	1.00	-44175
0	0						

Mass ordinate for TOPSOIL = 4857

482+00.00 EARTH

		Excavation	112	117	117	1.00	
33095	33095						
		Fill	0	54	54	1.00	-44112
77207	77207						
		TOPSOIL					
		Excavation	58	67	67	1.00	
4924	4924						
		Fill	0	0	0	1.00	-44112
0	0						

Mass ordinate for TOPSOIL = 4924

482+50.00 EARTH

		Excavation	355	432	432	1.00	
33527	33527						
		Fill	0	0	0	1.00	-43680
77207	77207						
		TOPSOIL					
		Excavation	65	114	114	1.00	
5038	5038						
		Fill	0	0	0	1.00	-43680
0	0						

Mass ordinate for TOPSOIL = 5038

483+00.00 EARTH

		Excavation	445	741	741	1.00	
34268	34268						
		Fill	0	0	0	1.00	-42939
77207	77207						
		TOPSOIL					
		Excavation	67	122	122	1.00	
5160	5160						
		Fill	0	0	0	1.00	-42939
0	0						

Mass ordinate for TOPSOIL = 5160

483+50.00 EARTH

		Excavation	508	882	882	1.00	
35150	35150						
		Fill	0	0	0	1.00	-42057
77207	77207						
		TOPSOIL					
		Excavation	69	126	126	1.00	
5286	5286						

0	0	Fill	0	0	0	1.00	-42057
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Mass ordinate for TOPSOIL = 5286

484+00.00 EARTH

		Excavation	661	1082	1082	1.00	
36232	36232						
		Fill	0	0	0	1.00	-40975

77207 77207

TOPSOIL

		Excavation	80	138	138	1.00	
5424	5424						
		Fill	0	0	0	1.00	-40975

0 0

Mass ordinate for TOPSOIL = 5424

484+50.00 EARTH

		Excavation	433	1013	1013	1.00	
37245	37245						
		Fill	0	0	0	1.00	-39962

77207 77207

TOPSOIL

		Excavation	57	127	127	1.00	
5551	5551						
		Fill	0	0	0	1.00	-39962

0 0

Mass ordinate for TOPSOIL = 5551

485+00.00 EARTH

		Excavation	558	918	918	1.00	
38163	38163						
		Fill	0	0	0	1.00	-39044

77207 77207

TOPSOIL

		Excavation	67	115	115	1.00	
5666	5666						
		Fill	0	0	0	1.00	-39044

0 0

Mass ordinate for TOPSOIL = 5666

485+50.00 EARTH

		Excavation	620	1091	1091	1.00	
39254	39254						
		Fill	0	0	0	1.00	-37953

77207 77207

TOPSOIL

		Excavation	72	129	129	1.00	
5795	5795						
		Fill	0	0	0	1.00	-37953

0 0

Mass ordinate for TOPSOIL = 5795

486+00.00 EARTH						
	Excavation	492	1030	1030	1.00	
40284	40284					
	Fill	54	50	50	1.00	-36973
77257	77257					
TOPSOIL						
	Excavation	55	118	118	1.00	
5913	5913					
	Fill	0	0	0	1.00	-36973
0	0					

Mass ordinate for TOPSOIL = 5913

486+50.00 EARTH						
	Excavation	255	692	692	1.00	
40976	40976					
	Fill	476	491	491	1.00	-36772
77748	77748					
TOPSOIL						
	Excavation	31	80	80	1.00	
5993	5993					
	Fill	0	0	0	1.00	-36772
0	0					

Mass ordinate for TOPSOIL = 5993

487+00.00 EARTH						
	Excavation	109	337	337	1.00	
41313	41313					
	Fill	823	1203	1203	1.00	-37638
78951	78951					
TOPSOIL						
	Excavation	20	47	47	1.00	
6040	6040					
	Fill	0	0	0	1.00	-37638
0	0					

Mass ordinate for TOPSOIL = 6040

487+50.00 EARTH						
	Excavation	243	326	326	1.00	
41639	41639					
	Fill	283	1024	1024	1.00	-38336
79975	79975					
TOPSOIL						
	Excavation	43	58	58	1.00	
6098	6098					
	Fill	0	0	0	1.00	-38336
0	0					

Mass ordinate for TOPSOIL = 6098

488+00.00 EARTH						
	Excavation	716	888	888	1.00	
42527	42527					
	Fill	0	262	262	1.00	-37710
80237	80237					
	TOPSOIL					
	Excavation	94	127	127	1.00	
6225	6225					
	Fill	0	0	0	1.00	-37710
0	0					
Mass ordinate for TOPSOIL = 6225						

488+50.00 EARTH						
	Excavation	1431	1988	1988	1.00	
44515	44515					
	Fill	0	0	0	1.00	-35722
80237	80237					
	TOPSOIL					
	Excavation	96	176	176	1.00	
6401	6401					
	Fill	0	0	0	1.00	-35722
0	0					
Mass ordinate for TOPSOIL = 6401						

489+00.00 EARTH						
	Excavation	2005	3181	3181	1.00	
47696	47696					
	Fill	0	0	0	1.00	-32541
80237	80237					
	TOPSOIL					
	Excavation	98	180	180	1.00	
6581	6581					
	Fill	0	0	0	1.00	-32541
0	0					
Mass ordinate for TOPSOIL = 6581						

489+50.00 EARTH						
	Excavation	2544	4212	4212	1.00	
51908	51908					
	Fill	0	0	0	1.00	-28329
80237	80237					
	TOPSOIL					
	Excavation	102	185	185	1.00	
6766	6766					
	Fill	0	0	0	1.00	-28329
0	0					
Mass ordinate for TOPSOIL = 6766						

490+00.00 EARTH						
	Excavation	2839	4984	4984	1.00	

56892	56892					
		Fill	0	0	0	1.00 -23345
80237	80237					
		TOPSOIL				
		Excavation	104	191	191	1.00
6957	6957					
		Fill	0	0	0	1.00 -23345
0	0					
		Mass ordinate for TOPSOIL = 6957				

		490+50.00 EARTH				
		Excavation	2858	5275	5275	1.00
62167	62167					
		Fill	0	0	0	1.00 -18070
80237	80237					
		TOPSOIL				
		Excavation	103	192	192	1.00
7149	7149					
		Fill	0	0	0	1.00 -18070
0	0					
		Mass ordinate for TOPSOIL = 7149				

		491+00.00 EARTH				
		Excavation	2555	5012	5012	1.00
67179	67179					
		Fill	0	0	0	1.00 -13058
80237	80237					
		TOPSOIL				
		Excavation	104	192	192	1.00
7341	7341					
		Fill	0	0	0	1.00 -13058
0	0					
		Mass ordinate for TOPSOIL = 7341				

		491+50.00 EARTH				
		Excavation	1903	4128	4128	1.00
71307	71307					
		Fill	0	0	0	1.00 -8930
80237	80237					
		TOPSOIL				
		Excavation	98	187	187	1.00
7528	7528					
		Fill	0	0	0	1.00 -8930
0	0					
		Mass ordinate for TOPSOIL = 7528				

		491+91.53 EARTH				
		Excavation	1605	2698	2698	1.00
74005	74005					
		Fill	0	0	0	1.00 -6232

80237	80237					
	TOPSOIL					
	Excavation	93	147	147	1.00	
7675	7675					
	Fill	0	0	0	1.00	-6232
0	0					
	Mass ordinate for TOPSOIL = 7675					

492+00.00	EARTH					
	Excavation	1591	501	501	1.00	
74506	74506					
	Fill	0	0	0	1.00	-5731
80237	80237					
	TOPSOIL					
	Excavation	92	29	29	1.00	
7704	7704					
	Fill	0	0	0	1.00	-5731
0	0					
	Mass ordinate for TOPSOIL = 7704					

492+50.00	EARTH					
	Excavation	1586	2942	2942	1.00	
77448	77448					
	Fill	0	0	0	1.00	-2789
80237	80237					
	TOPSOIL					
	Excavation	92	170	170	1.00	
7874	7874					
	Fill	0	0	0	1.00	-2789
0	0					
	Mass ordinate for TOPSOIL = 7874					

493+00.00	EARTH					
	Excavation	1346	2715	2715	1.00	
80163	80163					
	Fill	0	0	0	1.00	-74
80237	80237					
	TOPSOIL					
	Excavation	89	168	168	1.00	
8042	8042					
	Fill	0	0	0	1.00	-74
0	0					
	Mass ordinate for TOPSOIL = 8042					

493+50.00	EARTH					
	Excavation	1127	2290	2290	1.00	
82453	82453					
	Fill	0	0	0	1.00	2216
80237	80237					
	TOPSOIL					

		Excavation	84	160	160	1.00	
8202	8202						
		Fill	0	0	0	1.00	2216
0	0						

Mass ordinate for TOPSOIL = 8202

493+66.53 EARTH

		Excavation	1105	683	683	1.00	
83136	83136						
		Fill	0	0	0	1.00	2899
80237	80237						
		TOPSOIL					
		Excavation	89	53	53	1.00	
8255	8255						
		Fill	0	0	0	1.00	2899
0	0						

Mass ordinate for TOPSOIL = 8255

494+00.00 EARTH

		Excavation	892	1238	1238	1.00	
84374	84374						
		Fill	0	0	0	1.00	4137
80237	80237						
		TOPSOIL					
		Excavation	84	107	107	1.00	
8362	8362						
		Fill	0	0	0	1.00	4137
0	0						

Mass ordinate for TOPSOIL = 8362

494+50.00 EARTH

		Excavation	540	1326	1326	1.00	
85700	85700						
		Fill	0	0	0	1.00	5463
80237	80237						
		TOPSOIL					
		Excavation	70	143	143	1.00	
8505	8505						
		Fill	0	0	0	1.00	5463
0	0						

Mass ordinate for TOPSOIL = 8505

495+00.00 EARTH

		Excavation	117	608	608	1.00	
86308	86308						
		Fill	0	0	0	1.00	6071
80237	80237						
		TOPSOIL					
		Excavation	52	113	113	1.00	
8618	8618						

		Fill	0	0	0	1.00	6071
0	0						
		Mass ordinate for TOPSOIL = 8618					
		495+50.00 EARTH					
		Excavation	0	108	108	1.00	
86416	86416						
		Fill	368	341	341	1.00	5838
80578	80578						
		TOPSOIL					
		Excavation	0	48	48	1.00	
8666	8666						
		Fill	0	0	0	1.00	5838
0	0						
		Mass ordinate for TOPSOIL = 8666					
		496+00.00 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	682	972	972	1.00	4866
81550	81550						
		496+36.40 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	906	1070	1070	1.00	3796
82620	82620						
		496+50.00 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	978	474	474	1.00	3322
83094	83094						
		497+00.00 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	1200	2017	2017	1.00	1305
85111	85111						
		497+50.00 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	1167	2192	2192	1.00	-887
87303	87303						
		498+00.00 EARTH					
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	795	1817	1817	1.00	-2704

89120	89120						
498+11.40 EARTH							
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	684	312	312	1.00	-3016
89432	89432						
498+50.00 EARTH							
		Excavation	0	0	0	1.00	
86416	86416						
		Fill	367	751	751	1.00	-3767
90183	90183						
		TOPSOIL					
		Excavation	2	1	1	1.00	
8667	8667						
		Fill	0	0	0	1.00	-3767
0	0						
Mass ordinate for TOPSOIL = 8667							
499+00.00 EARTH							
		Excavation	36	33	33	1.00	
86449	86449						
		Fill	146	475	475	1.00	-4209
90658	90658						
		TOPSOIL					
		Excavation	15	16	16	1.00	
8683	8683						
		Fill	0	0	0	1.00	-4209
0	0						
Mass ordinate for TOPSOIL = 8683							
499+50.00 EARTH							
		Excavation	48	78	78	1.00	
86527	86527						
		Fill	109	236	236	1.00	-4367
90894	90894						
		TOPSOIL					
		Excavation	18	31	31	1.00	
8714	8714						
		Fill	0	0	0	1.00	-4367
0	0						
Mass ordinate for TOPSOIL = 8714							
500+00.00 EARTH							
		Excavation	49	90	90	1.00	
86617	86617						
		Fill	50	147	147	1.00	-4424
91041	91041						
		TOPSOIL					

		Excavation	23	38	38	1.00	
8752	8752						
		Fill	0	0	0	1.00	-4424
0	0						

Mass ordinate for TOPSOIL = 8752

500+50.00 EARTH

		Excavation	261	287	287	1.00	
86904	86904						
		Fill	0	46	46	1.00	-4183
91087	91087						
		TOPSOIL					
		Excavation	65	81	81	1.00	
8833	8833						
		Fill	0	0	0	1.00	-4183
0	0						

Mass ordinate for TOPSOIL = 8833

501+00.00 EARTH

		Excavation	657	850	850	1.00	
87754	87754						
		Fill	0	0	0	1.00	-3333
91087	91087						
		TOPSOIL					
		Excavation	74	129	129	1.00	
8962	8962						
		Fill	0	0	0	1.00	-3333
0	0						

Mass ordinate for TOPSOIL = 8962

501+50.00 EARTH

		Excavation	893	1435	1435	1.00	
89189	89189						
		Fill	0	0	0	1.00	-1898
91087	91087						
		TOPSOIL					
		Excavation	80	143	143	1.00	
9105	9105						
		Fill	0	0	0	1.00	-1898
0	0						

Mass ordinate for TOPSOIL = 9105

502+00.00 EARTH

		Excavation	389	1187	1187	1.00	
90376	90376						
		Fill	0	0	0	1.00	-711
91087	91087						
		TOPSOIL					
		Excavation	40	111	111	1.00	
9216	9216						

		Fill	0	0	0	1.00	-711
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0	0						
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Mass ordinate for TOPSOIL = 9216

502+50.00 EARTH

		Excavation	243	585	585	1.00	
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90961	90961						
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		Fill	0	0	0	1.00	-126
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91087	91087						
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TOPSOIL

		Excavation	37	71	71	1.00	
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9287	9287						
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		Fill	0	0	0	1.00	-126
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0	0						
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Mass ordinate for TOPSOIL = 9287

503+00.00 EARTH

		Excavation	88	306	306	1.00	
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91267	91267						
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		Fill	41	38	38	1.00	142
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91125	91125						
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TOPSOIL

		Excavation	25	57	57	1.00	
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9344	9344						
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		Fill	0	0	0	1.00	142
--	--	------	---	---	---	------	-----

0	0						
---	---	--	--	--	--	--	--

Mass ordinate for TOPSOIL = 9344

503+50.00 EARTH

		Excavation	107	181	181	1.00	
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91448	91448						
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		Fill	261	280	280	1.00	43
--	--	------	-----	-----	-----	------	----

91405	91405						
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TOPSOIL

		Excavation	23	44	44	1.00	
--	--	------------	----	----	----	------	--

9388	9388						
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		Fill	0	0	0	1.00	43
--	--	------	---	---	---	------	----

0	0						
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Mass ordinate for TOPSOIL = 9388

504+00.00 EARTH

		Excavation	398	468	468	1.00	
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91916	91916						
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		Fill	100	334	334	1.00	177
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91739	91739						
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TOPSOIL

		Excavation	50	68	68	1.00	
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9456	9456						
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		Fill	0	0	0	1.00	177
--	--	------	---	---	---	------	-----

0	0						
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Mass ordinate for TOPSOIL = 9456

504+50.00 EARTH

		Excavation	922	1222	1222	1.00	
93138	93138						
		Fill	0	93	93	1.00	1306
91832	91832						
		TOPSOIL					
		Excavation	94	133	133	1.00	
9589	9589						
		Fill	0	0	0	1.00	1306
0	0						

Mass ordinate for TOPSOIL = 9589

505+00.00 EARTH

		Excavation	835	1627	1627	1.00	
94765	94765						
		Fill	0	0	0	1.00	2933
91832	91832						
		TOPSOIL					
		Excavation	77	158	158	1.00	
9747	9747						
		Fill	0	0	0	1.00	2933
0	0						

Mass ordinate for TOPSOIL = 9747

505+50.00 EARTH

		Excavation	474	1212	1212	1.00	
95977	95977						
		Fill	0	0	0	1.00	4145
91832	91832						
		TOPSOIL					
		Excavation	62	129	129	1.00	
9876	9876						
		Fill	0	0	0	1.00	4145
0	0						

Mass ordinate for TOPSOIL = 9876

506+00.00 EARTH

		Excavation	299	716	716	1.00	
96693	96693						
		Fill	0	0	0	1.00	4861
91832	91832						
		TOPSOIL					
		Excavation	70	122	122	1.00	
9998	9998						
		Fill	0	0	0	1.00	4861
0	0						

Mass ordinate for TOPSOIL = 9998

506+50.00 EARTH						
		Excavation	318	571	571	1.00
97264	97264					
		Fill	0	0	0	1.00 5432
91832	91832					
		TOPSOIL				
		Excavation	43	105	105	1.00
10103	10103					
		Fill	0	0	0	1.00 5432
0	0					
Mass ordinate for TOPSOIL = 10103						

507+00.00 EARTH						
		Excavation	815	1049	1049	1.00
98313	98313					
		Fill	0	0	0	1.00 6481
91832	91832					
		TOPSOIL				
		Excavation	75	109	109	1.00
10212	10212					
		Fill	0	0	0	1.00 6481
0	0					
Mass ordinate for TOPSOIL = 10212						

507+50.00 EARTH						
		Excavation	797	1493	1493	1.00
99806	99806					
		Fill	0	0	0	1.00 7974
91832	91832					
		TOPSOIL				
		Excavation	73	137	137	1.00
10349	10349					
		Fill	0	0	0	1.00 7974
0	0					
Mass ordinate for TOPSOIL = 10349						

508+00.00 EARTH						
		Excavation	671	1359	1359	1.00
101165	101165					
		Fill	0	0	0	1.00 9333
91832	91832					
		TOPSOIL				
		Excavation	72	134	134	1.00
10483	10483					
		Fill	0	0	0	1.00 9333
0	0					
Mass ordinate for TOPSOIL = 10483						

508+50.00 EARTH						
		Excavation	709	1278	1278	1.00

102443	102443					
		Fill	0	0	0	1.00 10611
91832	91832					
		TOPSOIL				
		Excavation	75	136	136	1.00
10619	10619					
		Fill	0	0	0	1.00 10611
0	0					
		Mass ordinate for TOPSOIL = 10619				

		509+00.00 EARTH				
		Excavation	782	1381	1381	1.00
103824	103824					
		Fill	0	0	0	1.00 11992
91832	91832					
		TOPSOIL				
		Excavation	78	142	142	1.00
10761	10761					
		Fill	0	0	0	1.00 11992
0	0					
		Mass ordinate for TOPSOIL = 10761				

		509+50.00 EARTH				
		Excavation	950	1604	1604	1.00
105428	105428					
		Fill	0	0	0	1.00 13596
91832	91832					
		TOPSOIL				
		Excavation	72	139	139	1.00
10900	10900					
		Fill	0	0	0	1.00 13596
0	0					
		Mass ordinate for TOPSOIL = 10900				

		510+00.00 EARTH				
		Excavation	1045	1847	1847	1.00
107275	107275					
		Fill	0	0	0	1.00 15443
91832	91832					
		TOPSOIL				
		Excavation	49	112	112	1.00
11012	11012					
		Fill	0	0	0	1.00 15443
0	0					
		Mass ordinate for TOPSOIL = 11012				

		510+50.00 EARTH				
		Excavation	1173	2054	2054	1.00
109329	109329					
		Fill	0	0	0	1.00 17497

91832	91832					
	TOPSOIL					
	Excavation	85	124	124	1.00	
11136	11136					
	Fill	0	0	0	1.00	17497
0	0					
	Mass ordinate for TOPSOIL = 11136					
511+00.00 EARTH						
	Excavation	1153	2154	2154	1.00	
111483	111483					
	Fill	0	0	0	1.00	19651
91832	91832					
	TOPSOIL					
	Excavation	87	159	159	1.00	
11295	11295					
	Fill	0	0	0	1.00	19651
0	0					
	Mass ordinate for TOPSOIL = 11295					
511+50.00 EARTH						
	Excavation	130	1188	1188	1.00	
112671	112671					
	Fill	0	0	0	1.00	20839
91832	91832					
	TOPSOIL					
	Excavation	12	92	92	1.00	
11387	11387					
	Fill	0	0	0	1.00	20839
0	0					
	Mass ordinate for TOPSOIL = 11387					
512+00.00 EARTH						
	Excavation	563	642	642	1.00	
113313	113313					
	Fill	0	0	0	1.00	21481
91832	91832					
	TOPSOIL					
	Excavation	73	79	79	1.00	
11466	11466					
	Fill	0	0	0	1.00	21481
0	0					
	Mass ordinate for TOPSOIL = 11466					
512+50.00 EARTH						
	Excavation	311	809	809	1.00	
114122	114122					
	Fill	0	0	0	1.00	22290
91832	91832					
	TOPSOIL					

11593	11593	Excavation	64	127	127	1.00	
0	0	Fill	0	0	0	1.00	22290

Mass ordinate for TOPSOIL = 11593

513+00.00 EARTH							
114539	114539	Excavation	139	417	417	1.00	
91832	91832	Fill	0	0	0	1.00	22707
TOPSOIL							
11701	11701	Excavation	53	108	108	1.00	
0	0	Fill	0	0	0	1.00	22707

Mass ordinate for TOPSOIL = 11701

513+50.00 EARTH							
114725	114725	Excavation	62	186	186	1.00	
91863	91863	Fill	33	31	31	1.00	22862
TOPSOIL							
11776	11776	Excavation	28	75	75	1.00	
0	0	Fill	0	0	0	1.00	22862

Mass ordinate for TOPSOIL = 11776

514+00.00 EARTH							
114830	114830	Excavation	51	105	105	1.00	
91919	91919	Fill	28	56	56	1.00	22911
TOPSOIL							
11827	11827	Excavation	27	51	51	1.00	
0	0	Fill	0	0	0	1.00	22911

Mass ordinate for TOPSOIL = 11827

514+03.91 EARTH							
114837	114837	Excavation	51	7	7	1.00	
91923	91923	Fill	24	4	4	1.00	22914
TOPSOIL							
11831	11831	Excavation	27	4	4	1.00	

		Fill	0	0	0	1.00	22914
0	0						
		Mass ordinate for TOPSOIL = 11831					
		514+50.00 EARTH					
		Excavation	57	92	92	1.00	
114929	114929						
		Fill	43	57	57	1.00	22949
91980	91980						
		TOPSOIL					
		Excavation	26	45	45	1.00	
11876	11876						
		Fill	0	0	0	1.00	22949
0	0						
		Mass ordinate for TOPSOIL = 11876					
		515+00.00 EARTH					
		Excavation	36	86	86	1.00	
115015	115015						
		Fill	42	79	79	1.00	22956
92059	92059						
		TOPSOIL					
		Excavation	25	47	47	1.00	
11923	11923						
		Fill	0	0	0	1.00	22956
0	0						
		Mass ordinate for TOPSOIL = 11923					
		515+50.00 EARTH					
		Excavation	61	90	90	1.00	
115105	115105						
		Fill	0	39	39	1.00	23007
92098	92098						
		TOPSOIL					
		Excavation	38	58	58	1.00	
11981	11981						
		Fill	0	0	0	1.00	23007
0	0						
		Mass ordinate for TOPSOIL = 11981					
		515+70.58 EARTH					
		Excavation	75	52	52	1.00	
115157	115157						
		Fill	0	0	0	1.00	23059
92098	92098						
		TOPSOIL					
		Excavation	52	34	34	1.00	
12015	12015						
		Fill	0	0	0	1.00	23059
0	0						

Mass ordinate for TOPSOIL = 12015

515+78.91 EARTH

		Excavation	89	25	25	1.00	
115182	115182						
		Fill	0	0	0	1.00	23084
92098	92098						
		TOPSOIL					
		Excavation	56	17	17	1.00	
12032	12032						
		Fill	0	0	0	1.00	23084
0	0						

Mass ordinate for TOPSOIL = 12032

516+00.00 EARTH

		Excavation	169	101	101	1.00	
115283	115283						
		Fill	0	0	0	1.00	23185
92098	92098						
		TOPSOIL					
		Excavation	57	44	44	1.00	
12076	12076						
		Fill	0	0	0	1.00	23185
0	0						

Mass ordinate for TOPSOIL = 12076

516+50.00 EARTH

		Excavation	138	284	284	1.00	
115567	115567						
		Fill	0	0	0	1.00	23469
92098	92098						
		TOPSOIL					
		Excavation	56	105	105	1.00	
12181	12181						
		Fill	0	0	0	1.00	23469
0	0						

Mass ordinate for TOPSOIL = 12181

517+00.00 EARTH

		Excavation	109	229	229	1.00	
115796	115796						
		Fill	0	0	0	1.00	23698
92098	92098						
		TOPSOIL					
		Excavation	55	103	103	1.00	
12284	12284						
		Fill	0	0	0	1.00	23698
0	0						

Mass ordinate for TOPSOIL = 12284

517+50.00 EARTH						
	Excavation	58	155	155	1.00	
115951	115951					
	Fill	0	0	0	1.00	23853
92098	92098					
	TOPSOIL					
	Excavation	50	97	97	1.00	
12381	12381					
	Fill	0	0	0	1.00	23853
0	0					
Mass ordinate for TOPSOIL = 12381						

517+99.42 EARTH						
	Excavation	52	101	101	1.00	
116052	116052					
	Fill	0	0	0	1.00	23954
92098	92098					
	TOPSOIL					
	Excavation	49	91	91	1.00	
12472	12472					
	Fill	0	0	0	1.00	23954
0	0					
Mass ordinate for TOPSOIL = 12472						

518+00.00 EARTH						
	Excavation	52	1	1	1.00	
116053	116053					
	Fill	0	0	0	1.00	23955
92098	92098					
	TOPSOIL					
	Excavation	49	1	1	1.00	
12473	12473					
	Fill	0	0	0	1.00	23955
0	0					
Mass ordinate for TOPSOIL = 12473						

518+07.75 EARTH						
	Excavation	51	15	15	1.00	
116068	116068					
	Fill	0	0	0	1.00	23970
92098	92098					
	TOPSOIL					
	Excavation	49	14	14	1.00	
12487	12487					
	Fill	0	0	0	1.00	23970
0	0					
Mass ordinate for TOPSOIL = 12487						

518+50.00 EARTH						
	Excavation	79	102	102	1.00	

116170	116170					
		Fill	0	0	0	1.00 24072
92098	92098	TOPSOIL				
		Excavation	54	81	81	1.00
12568	12568					
		Fill	0	0	0	1.00 24072
0	0					
		Mass ordinate for TOPSOIL = 12568				

	519+00.00	EARTH				
		Excavation	121	185	185	1.00
116355	116355					
		Fill	0	0	0	1.00 24257
92098	92098	TOPSOIL				
		Excavation	56	102	102	1.00
12670	12670					
		Fill	0	0	0	1.00 24257
0	0					
		Mass ordinate for TOPSOIL = 12670				

	519+50.00	EARTH				
		Excavation	126	229	229	1.00
116584	116584					
		Fill	0	0	0	1.00 24486
92098	92098	TOPSOIL				
		Excavation	57	105	105	1.00
12775	12775					
		Fill	0	0	0	1.00 24486
0	0					
		Mass ordinate for TOPSOIL = 12775				

	519+74.42	EARTH				
		Excavation	152	126	126	1.00
116710	116710					
		Fill	0	0	0	1.00 24612
92098	92098	TOPSOIL				
		Excavation	55	51	51	1.00
12826	12826					
		Fill	0	0	0	1.00 24612
0	0					
		Mass ordinate for TOPSOIL = 12826				

	520+00.00	EARTH				
		Excavation	148	142	142	1.00
116852	116852					
		Fill	0	0	0	1.00 24754

92098	92098					
	TOPSOIL					
	Excavation	57	53	53	1.00	
12879	12879					
	Fill	0	0	0	1.00	24754
0	0					
	Mass ordinate for TOPSOIL = 12879					
520+50.00 EARTH						
	Excavation	75	206	206	1.00	
117058	117058					
	Fill	1	1	1	1.00	24959
92099	92099					
	TOPSOIL					
	Excavation	44	94	94	1.00	
12973	12973					
	Fill	0	0	0	1.00	24959
0	0					
	Mass ordinate for TOPSOIL = 12973					
521+00.00 EARTH						
	Excavation	39	106	106	1.00	
117164	117164					
	Fill	32	31	31	1.00	25034
92130	92130					
	TOPSOIL					
	Excavation	18	57	57	1.00	
13030	13030					
	Fill	0	0	0	1.00	25034
0	0					
	Mass ordinate for TOPSOIL = 13030					
521+50.00 EARTH						
	Excavation	24	58	58	1.00	
117222	117222					
	Fill	70	94	94	1.00	24998
92224	92224					
	TOPSOIL					
	Excavation	13	29	29	1.00	
13059	13059					
	Fill	0	0	0	1.00	24998
0	0					
	Mass ordinate for TOPSOIL = 13059					
522+00.00 EARTH						
	Excavation	24	44	44	1.00	
117266	117266					
	Fill	61	121	121	1.00	24921
92345	92345					
	TOPSOIL					

		Excavation	12	23	23	1.00	
13082	13082						
		Fill	0	0	0	1.00	24921
0	0						

Mass ordinate for TOPSOIL = 13082

522+50.00 EARTH							
		Excavation	20	41	41	1.00	
117307	117307						
		Fill	48	101	101	1.00	24861
92446	92446						
TOPSOIL							
		Excavation	13	23	23	1.00	
13105	13105						
		Fill	0	0	0	1.00	24861
0	0						

Mass ordinate for TOPSOIL = 13105

523+00.00 EARTH							
		Excavation	35	51	51	1.00	
117358	117358						
		Fill	30	72	72	1.00	24840
92518	92518						
TOPSOIL							
		Excavation	19	30	30	1.00	
13135	13135						
		Fill	0	0	0	1.00	24840
0	0						

Mass ordinate for TOPSOIL = 13135

523+50.00 EARTH							
		Excavation	90	116	116	1.00	
117474	117474						
		Fill	0	28	28	1.00	24928
92546	92546						
TOPSOIL							
		Excavation	56	69	69	1.00	
13204	13204						
		Fill	0	0	0	1.00	24928
0	0						

Mass ordinate for TOPSOIL = 13204

524+00.00 EARTH							
		Excavation	115	190	190	1.00	
117664	117664						
		Fill	0	0	0	1.00	25118
92546	92546						
TOPSOIL							
		Excavation	56	104	104	1.00	
13308	13308						

0	0	Fill	0	0	0	1.00	25118
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Mass ordinate for TOPSOIL = 13308

524+50.00 EARTH

		Excavation	90	190	190	1.00	
117854	117854						
		Fill	6	6	6	1.00	25302

92552	92552	TOPSOIL					
		Excavation	43	92	92	1.00	

13400	13400						
		Fill	0	0	0	1.00	25302

0	0						
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Mass ordinate for TOPSOIL = 13400

525+00.00 EARTH

		Excavation	64	143	143	1.00	
117997	117997						
		Fill	14	19	19	1.00	25426

92571	92571	TOPSOIL					
		Excavation	30	68	68	1.00	

13468	13468						
		Fill	0	0	0	1.00	25426

0	0						
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Mass ordinate for TOPSOIL = 13468

525+50.00 EARTH

		Excavation	88	141	141	1.00	
118138	118138						
		Fill	0	13	13	1.00	25554

92584	92584	TOPSOIL					
		Excavation	46	70	70	1.00	

13538	13538						
		Fill	0	0	0	1.00	25554

0	0						
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Mass ordinate for TOPSOIL = 13538

526+00.00 EARTH

		Excavation	142	213	213	1.00	
118351	118351						
		Fill	0	0	0	1.00	25767

92584	92584	TOPSOIL					
		Excavation	57	95	95	1.00	

13633	13633						
		Fill	0	0	0	1.00	25767

0	0						
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Mass ordinate for TOPSOIL = 13633

526+50.00 EARTH

		Excavation	121	244	244	1.00	
118595	118595						
		Fill	0	0	0	1.00	26011
92584	92584						
		TOPSOIL					
		Excavation	57	106	106	1.00	
13739	13739						
		Fill	0	0	0	1.00	26011
0	0						

Mass ordinate for TOPSOIL = 13739

527+00.00 EARTH

		Excavation	143	244	244	1.00	
118839	118839						
		Fill	0	0	0	1.00	26255
92584	92584						
		TOPSOIL					
		Excavation	59	107	107	1.00	
13846	13846						
		Fill	0	0	0	1.00	26255
0	0						

Mass ordinate for TOPSOIL = 13846

527+50.00 EARTH

		Excavation	188	306	306	1.00	
119145	119145						
		Fill	0	0	0	1.00	26561
92584	92584						
		TOPSOIL					
		Excavation	61	111	111	1.00	
13957	13957						
		Fill	0	0	0	1.00	26561
0	0						

Mass ordinate for TOPSOIL = 13957

528+00.00 EARTH

		Excavation	210	369	369	1.00	
119514	119514						
		Fill	0	0	0	1.00	26930
92584	92584						
		TOPSOIL					
		Excavation	61	113	113	1.00	
14070	14070						
		Fill	0	0	0	1.00	26930
0	0						

Mass ordinate for TOPSOIL = 14070

528+50.00 EARTH						
	Excavation	231	408	408	1.00	
119922	119922					
	Fill	0	0	0	1.00	27338
92584	92584					
	TOPSOIL					
	Excavation	62	114	114	1.00	
14184	14184					
	Fill	0	0	0	1.00	27338
0	0					

Mass ordinate for TOPSOIL = 14184

529+00.00 EARTH						
	Excavation	185	385	385	1.00	
120307	120307					
	Fill	0	0	0	1.00	27723
92584	92584					
	TOPSOIL					
	Excavation	57	110	110	1.00	
14294	14294					
	Fill	0	0	0	1.00	27723
0	0					

Mass ordinate for TOPSOIL = 14294

529+50.00 EARTH						
	Excavation	67	233	233	1.00	
120540	120540					
	Fill	0	0	0	1.00	27956
92584	92584					
	TOPSOIL					
	Excavation	53	102	102	1.00	
14396	14396					
	Fill	0	0	0	1.00	27956
0	0					

Mass ordinate for TOPSOIL = 14396

530+00.00 EARTH						
	Excavation	5	67	67	1.00	
120607	120607					
	Fill	84	78	78	1.00	27945
92662	92662					
	TOPSOIL					
	Excavation	7	56	56	1.00	
14452	14452					
	Fill	0	0	0	1.00	27945
0	0					

Mass ordinate for TOPSOIL = 14452

530+50.00 EARTH						
	Excavation	0	5	5	1.00	

120612	120612						
		Fill	296	352	352	1.00	27598
93014	93014						
		TOPSOIL					
		Excavation	0	6	6	1.00	
14458	14458						
		Fill	0	0	0	1.00	27598
0	0						

Mass ordinate for TOPSOIL = 14458

531+00.00 EARTH							
		Excavation	0	0	0	1.00	
120612	120612						
		Fill	432	674	674	1.00	26924
93688	93688						

531+50.00 EARTH							
		Excavation	0	0	0	1.00	
120612	120612						
		Fill	499	862	862	1.00	26062
94550	94550						

532+00.00 EARTH							
		Excavation	0	0	0	1.00	
120612	120612						
		Fill	503	928	928	1.00	25134
95478	95478						

532+50.00 EARTH							
		Excavation	0	0	0	1.00	
120612	120612						
		Fill	494	923	923	1.00	24211
96401	96401						
		TOPSOIL					
		Excavation	2	2	2	1.00	
14460	14460						
		Fill	0	0	0	1.00	24211
0	0						

Mass ordinate for TOPSOIL = 14460

533+00.00 EARTH							
		Excavation	0	0	0	1.00	
120612	120612						
		Fill	439	864	864	1.00	23347
97265	97265						
		TOPSOIL					
		Excavation	1	3	3	1.00	
14463	14463						
		Fill	0	0	0	1.00	23347
0	0						

Mass ordinate for TOPSOIL = 14463

533+50.00 EARTH						
	Excavation	0	0	0	1.00	
120612	120612					
	Fill	340	721	721	1.00	22626
97986	97986					
TOPSOIL						
	Excavation	0	1	1	1.00	
14464	14464					
	Fill	0	0	0	1.00	22626
0	0					

Mass ordinate for TOPSOIL = 14464

534+00.00 EARTH						
	Excavation	0	0	0	1.00	
120612	120612					
	Fill	242	539	539	1.00	22087
98525	98525					

534+50.00 EARTH						
	Excavation	5	5	5	1.00	
120617	120617					
	Fill	115	331	331	1.00	21761
98856	98856					
TOPSOIL						
	Excavation	6	6	6	1.00	
14470	14470					
	Fill	0	0	0	1.00	21761
0	0					

Mass ordinate for TOPSOIL = 14470

535+00.00 EARTH						
	Excavation	59	59	59	1.00	
120676	120676					
	Fill	11	117	117	1.00	21703
98973	98973					
TOPSOIL						
	Excavation	35	38	38	1.00	
14508	14508					
	Fill	0	0	0	1.00	21703
0	0					

Mass ordinate for TOPSOIL = 14508

535+50.00 EARTH						
	Excavation	294	327	327	1.00	
121003	121003					
	Fill	0	10	10	1.00	22020
98983	98983					
TOPSOIL						

14601	14601	Excavation	65	93	93	1.00	
0	0	Fill	0	0	0	1.00	22020

Mass ordinate for TOPSOIL = 14601

536+00.00 EARTH							
121799	121799	Excavation	566	796	796	1.00	
98983	98983	Fill	0	0	0	1.00	22816
TOPSOIL							
14729	14729	Excavation	73	128	128	1.00	
0	0	Fill	0	0	0	1.00	22816

Mass ordinate for TOPSOIL = 14729

536+50.00 EARTH							
123033	123033	Excavation	767	1234	1234	1.00	
98983	98983	Fill	0	0	0	1.00	24050
TOPSOIL							
14870	14870	Excavation	79	141	141	1.00	
0	0	Fill	0	0	0	1.00	24050

Mass ordinate for TOPSOIL = 14870

537+00.00 EARTH							
124615	124615	Excavation	942	1582	1582	1.00	
98983	98983	Fill	0	0	0	1.00	25632
TOPSOIL							
15021	15021	Excavation	84	151	151	1.00	
0	0	Fill	0	0	0	1.00	25632

Mass ordinate for TOPSOIL = 15021

537+50.00 EARTH							
126457	126457	Excavation	1047	1842	1842	1.00	
98983	98983	Fill	0	0	0	1.00	27474
TOPSOIL							
15177	15177	Excavation	85	156	156	1.00	

0	0	Fill	0	0	0	1.00	27474
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Mass ordinate for TOPSOIL = 15177

538+00.00 EARTH

128356	128356	Excavation	1004	1899	1899	1.00	
98983	98983	Fill	0	0	0	1.00	29373

TOPSOIL

15333	15333	Excavation	83	156	156	1.00	
0	0	Fill	0	0	0	1.00	29373

Mass ordinate for TOPSOIL = 15333

538+50.00 EARTH

130094	130094	Excavation	873	1738	1738	1.00	
98983	98983	Fill	0	0	0	1.00	31111

TOPSOIL

15483	15483	Excavation	79	150	150	1.00	
0	0	Fill	0	0	0	1.00	31111

Mass ordinate for TOPSOIL = 15483

539+00.00 EARTH

131629	131629	Excavation	785	1535	1535	1.00	
98983	98983	Fill	0	0	0	1.00	32646

TOPSOIL

15627	15627	Excavation	76	144	144	1.00	
0	0	Fill	0	0	0	1.00	32646

Mass ordinate for TOPSOIL = 15627

539+50.00 EARTH

133075	133075	Excavation	777	1446	1446	1.00	
98983	98983	Fill	0	0	0	1.00	34092

TOPSOIL

15768	15768	Excavation	76	141	141	1.00	
0	0	Fill	0	0	0	1.00	34092

Mass ordinate for TOPSOIL = 15768

540+00.00 EARTH

		Excavation	856	1512	1512	1.00	
134587	134587						
		Fill	0	0	0	1.00	35604
98983	98983						
		TOPSOIL					
		Excavation	78	143	143	1.00	
15911	15911						
		Fill	0	0	0	1.00	35604
0	0						

Mass ordinate for TOPSOIL = 15911

540+50.00 EARTH

		Excavation	986	1706	1706	1.00	
136293	136293						
		Fill	0	0	0	1.00	37310
98983	98983						
		TOPSOIL					
		Excavation	80	146	146	1.00	
16057	16057						
		Fill	0	0	0	1.00	37310
0	0						

Mass ordinate for TOPSOIL = 16057

541+00.00 EARTH

		Excavation	1120	1950	1950	1.00	
138243	138243						
		Fill	0	0	0	1.00	39260
98983	98983						
		TOPSOIL					
		Excavation	82	150	150	1.00	
16207	16207						
		Fill	0	0	0	1.00	39260
0	0						

Mass ordinate for TOPSOIL = 16207

541+50.00 EARTH

		Excavation	1078	2035	2035	1.00	
140278	140278						
		Fill	0	0	0	1.00	41295
98983	98983						
		TOPSOIL					
		Excavation	83	153	153	1.00	
16360	16360						
		Fill	0	0	0	1.00	41295
0	0						

Mass ordinate for TOPSOIL = 16360

542+00.00 EARTH						
	Excavation	871	1805	1805	1.00	
142083	142083					
	Fill	0	0	0	1.00	43100
98983	98983					
	TOPSOIL					
	Excavation	79	150	150	1.00	
16510	16510					
	Fill	0	0	0	1.00	43100
0	0					
Mass ordinate for TOPSOIL = 16510						

542+50.00 EARTH						
	Excavation	575	1339	1339	1.00	
143422	143422					
	Fill	0	0	0	1.00	44439
98983	98983					
	TOPSOIL					
	Excavation	71	139	139	1.00	
16649	16649					
	Fill	0	0	0	1.00	44439
0	0					
Mass ordinate for TOPSOIL = 16649						

543+00.00 EARTH						
	Excavation	265	778	778	1.00	
144200	144200					
	Fill	1	1	1	1.00	45216
98984	98984					
	TOPSOIL					
	Excavation	56	118	118	1.00	
16767	16767					
	Fill	0	0	0	1.00	45216
0	0					
Mass ordinate for TOPSOIL = 16767						

543+50.00 EARTH						
	Excavation	63	304	304	1.00	
144504	144504					
	Fill	91	85	85	1.00	45435
99069	99069					
	TOPSOIL					
	Excavation	22	72	72	1.00	
16839	16839					
	Fill	0	0	0	1.00	45435
0	0					
Mass ordinate for TOPSOIL = 16839						

544+00.00 EARTH						
	Excavation	3	61	61	1.00	

144565	144565					
		Fill	248	314	314	1.00 45182
99383	99383					
		TOPSOIL				
		Excavation	5	25	25	1.00
16864	16864					
		Fill	0	0	0	1.00 45182
0	0					
		Mass ordinate for TOPSOIL = 16864				

		544+50.00 EARTH				
		Excavation	0	3	3	1.00
144568	144568					
		Fill	468	663	663	1.00 44522
100046	100046					
		TOPSOIL				
		Excavation	0	5	5	1.00
16869	16869					
		Fill	0	0	0	1.00 44522
0	0					
		Mass ordinate for TOPSOIL = 16869				

		545+00.00 EARTH				
		Excavation	26	24	24	1.00
144592	144592					
		Fill	282	694	694	1.00 43852
100740	100740					
		TOPSOIL				
		Excavation	16	15	15	1.00
16884	16884					
		Fill	0	0	0	1.00 43852
0	0					
		Mass ordinate for TOPSOIL = 16884				

		545+50.00 EARTH				
		Excavation	22	44	44	1.00
144636	144636					
		Fill	380	613	613	1.00 43283
101353	101353					
		TOPSOIL				
		Excavation	11	25	25	1.00
16909	16909					
		Fill	0	0	0	1.00 43283
0	0					
		Mass ordinate for TOPSOIL = 16909				

		546+00.00 EARTH				
		Excavation	1	21	21	1.00
144657	144657					
		Fill	275	606	606	1.00 42698

101959	101959					
	TOPSOIL					
	Excavation	3	13	13	1.00	
16922	16922					
	Fill	0	0	0	1.00	42698
0	0					
	Mass ordinate for TOPSOIL = 16922					
546+50.00 EARTH						
	Excavation	2	3	3	1.00	
144660	144660					
	Fill	715	917	917	1.00	41784
102876	102876					
	TOPSOIL					
	Excavation	4	6	6	1.00	
16928	16928					
	Fill	0	0	0	1.00	41784
0	0					
	Mass ordinate for TOPSOIL = 16928					
547+00.00 EARTH						
	Excavation	16	17	17	1.00	
144677	144677					
	Fill	627	1243	1243	1.00	40558
104119	104119					
	TOPSOIL					
	Excavation	14	17	17	1.00	
16945	16945					
	Fill	0	0	0	1.00	40558
0	0					
	Mass ordinate for TOPSOIL = 16945					
547+50.00 EARTH						
	Excavation	98	106	106	1.00	
144783	144783					
	Fill	167	735	735	1.00	39929
104854	104854					
	TOPSOIL					
	Excavation	37	47	47	1.00	
16992	16992					
	Fill	0	0	0	1.00	39929
0	0					
	Mass ordinate for TOPSOIL = 16992					
548+00.00 EARTH						
	Excavation	167	245	245	1.00	
145028	145028					
	Fill	27	180	180	1.00	39994
105034	105034					
	TOPSOIL					

		Excavation	57	87	87	1.00	
17079	17079						
		Fill	0	0	0	1.00	39994
0	0						

Mass ordinate for TOPSOIL = 17079

548+50.00 EARTH

		Excavation	155	298	298	1.00	
145326	145326						
		Fill	171	183	183	1.00	40109
105217	105217						
		TOPSOIL					
		Excavation	35	85	85	1.00	
17164	17164						
		Fill	0	0	0	1.00	40109
0	0						

Mass ordinate for TOPSOIL = 17164

549+00.00 EARTH

		Excavation	125	259	259	1.00	
145585	145585						
		Fill	209	352	352	1.00	40016
105569	105569						
		TOPSOIL					
		Excavation	31	61	61	1.00	
17225	17225						
		Fill	0	0	0	1.00	40016
0	0						

Mass ordinate for TOPSOIL = 17225

549+50.00 EARTH

		Excavation	115	222	222	1.00	
145807	145807						
		Fill	137	320	320	1.00	39918
105889	105889						
		TOPSOIL					
		Excavation	46	71	71	1.00	
17296	17296						
		Fill	0	0	0	1.00	39918
0	0						

Mass ordinate for TOPSOIL = 17296

550+00.00 EARTH

		Excavation	195	287	287	1.00	
146094	146094						
		Fill	43	167	167	1.00	40038
106056	106056						
		TOPSOIL					
		Excavation	59	97	97	1.00	
17393	17393						

0	0	Fill	0	0	0	1.00	40038
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Mass ordinate for TOPSOIL = 17393

550+50.00 EARTH

		Excavation	307	465	465	1.00	
146559	146559						
		Fill	0	40	40	1.00	40463

106096	106096	TOPSOIL					
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		Excavation	91	139	139	1.00	
17532	17532						

		Fill	0	0	0	1.00	40463
0	0						

Mass ordinate for TOPSOIL = 17532

551+00.00 EARTH

		Excavation	373	630	630	1.00	
147189	147189						
		Fill	0	0	0	1.00	41093

106096	106096	TOPSOIL					
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		Excavation	92	169	169	1.00	
17701	17701						

		Fill	0	0	0	1.00	41093
0	0						

Mass ordinate for TOPSOIL = 17701

551+50.00 EARTH

		Excavation	354	673	673	1.00	
147862	147862						
		Fill	0	0	0	1.00	41766

106096	106096	TOPSOIL					
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		Excavation	92	170	170	1.00	
17871	17871						

		Fill	0	0	0	1.00	41766
0	0						

Mass ordinate for TOPSOIL = 17871

552+00.00 EARTH

		Excavation	174	489	489	1.00	
148351	148351						
		Fill	146	135	135	1.00	42120

106231	106231	TOPSOIL					
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		Excavation	38	120	120	1.00	
17991	17991						

		Fill	0	0	0	1.00	42120
0	0						

Mass ordinate for TOPSOIL = 17991

552+50.00 EARTH						
	Excavation	67	223	223	1.00	
148574	148574					
	Fill	827	901	901	1.00	41442
107132	107132					
TOPSOIL						
	Excavation	17	51	51	1.00	
18042	18042					
	Fill	0	0	0	1.00	41442
0	0					

Mass ordinate for TOPSOIL = 18042

553+00.00 EARTH						
	Excavation	0	62	62	1.00	
148636	148636					
	Fill	1085	1770	1770	1.00	39734
108902	108902					
TOPSOIL						
	Excavation	3	19	19	1.00	
18061	18061					
	Fill	0	0	0	1.00	39734
0	0					

Mass ordinate for TOPSOIL = 18061

553+50.00 EARTH						
	Excavation	0	0	0	1.00	
148636	148636					
	Fill	706	1658	1658	1.00	38076
110560	110560					
TOPSOIL						
	Excavation	0	3	3	1.00	
18064	18064					
	Fill	0	0	0	1.00	38076
0	0					

Mass ordinate for TOPSOIL = 18064

554+00.00 EARTH						
	Excavation	33	31	31	1.00	
148667	148667					
	Fill	226	863	863	1.00	37244
111423	111423					
TOPSOIL						
	Excavation	13	12	12	1.00	
18076	18076					
	Fill	0	0	0	1.00	37244
0	0					

Mass ordinate for TOPSOIL = 18076

554+50.00 EARTH						
	Excavation	176	194	194	1.00	
148861	148861					
	Fill	0	209	209	1.00	37229
111632	111632					
	TOPSOIL					
	Excavation	65	72	72	1.00	
18148	18148					
	Fill	0	0	0	1.00	37229
0	0					

Mass ordinate for TOPSOIL = 18148

555+00.00 EARTH						
	Excavation	387	521	521	1.00	
149382	149382					
	Fill	0	0	0	1.00	37750
111632	111632					
	TOPSOIL					
	Excavation	84	138	138	1.00	
18286	18286					
	Fill	0	0	0	1.00	37750
0	0					

Mass ordinate for TOPSOIL = 18286

555+50.00 EARTH						
	Excavation	172	518	518	1.00	
149900	149900					
	Fill	51	47	47	1.00	38221
111679	111679					
	TOPSOIL					
	Excavation	67	140	140	1.00	
18426	18426					
	Fill	0	0	0	1.00	38221
0	0					

Mass ordinate for TOPSOIL = 18426

556+00.00 EARTH						
	Excavation	15	173	173	1.00	
150073	150073					
	Fill	613	615	615	1.00	37779
112294	112294					
	TOPSOIL					
	Excavation	12	73	73	1.00	
18499	18499					
	Fill	0	0	0	1.00	37779
0	0					

Mass ordinate for TOPSOIL = 18499

556+50.00 EARTH						
	Excavation	0	14	14	1.00	

150087	150087					
		Fill	364	905	905	1.00 36888
113199	113199	TOPSOIL				
		Excavation	0	11	11	1.00
18510	18510					
		Fill	0	0	0	1.00 36888
0	0					
		Mass ordinate for TOPSOIL = 18510				

	557+00.00	EARTH				
		Excavation	1	1	1	1.00
150088	150088					
		Fill	213	534	534	1.00 36355
113733	113733	TOPSOIL				
		Excavation	3	3	3	1.00
18513	18513					
		Fill	0	0	0	1.00 36355
0	0					
		Mass ordinate for TOPSOIL = 18513				

	557+50.00	EARTH				
		Excavation	31	30	30	1.00
150118	150118					
		Fill	34	229	229	1.00 36156
113962	113962	TOPSOIL				
		Excavation	16	18	18	1.00
18531	18531					
		Fill	0	0	0	1.00 36156
0	0					
		Mass ordinate for TOPSOIL = 18531				

	558+00.00	EARTH				
		Excavation	219	231	231	1.00
150349	150349					
		Fill	0	31	31	1.00 36356
113993	113993	TOPSOIL				
		Excavation	63	73	73	1.00
18604	18604					
		Fill	0	0	0	1.00 36356
0	0					
		Mass ordinate for TOPSOIL = 18604				

	558+50.00	EARTH				
		Excavation	449	619	619	1.00
150968	150968					
		Fill	0	0	0	1.00 36975

113993	113993					
	TOPSOIL					
	Excavation	69	122	122	1.00	
18726	18726					
	Fill	0	0	0	1.00	36975
0	0					
	Mass ordinate for TOPSOIL = 18726					
559+00.00 EARTH						
	Excavation	606	977	977	1.00	
151945	151945					
	Fill	0	0	0	1.00	37952
113993	113993					
	TOPSOIL					
	Excavation	73	131	131	1.00	
18857	18857					
	Fill	0	0	0	1.00	37952
0	0					
	Mass ordinate for TOPSOIL = 18857					
559+50.00 EARTH						
	Excavation	565	1084	1084	1.00	
153029	153029					
	Fill	0	0	0	1.00	39036
113993	113993					
	TOPSOIL					
	Excavation	71	133	133	1.00	
18990	18990					
	Fill	0	0	0	1.00	39036
0	0					
	Mass ordinate for TOPSOIL = 18990					
560+00.00 EARTH						
	Excavation	436	927	927	1.00	
153956	153956					
	Fill	0	0	0	1.00	39963
113993	113993					
	TOPSOIL					
	Excavation	67	128	128	1.00	
19118	19118					
	Fill	0	0	0	1.00	39963
0	0					
	Mass ordinate for TOPSOIL = 19118					
560+50.00 EARTH						
	Excavation	110	506	506	1.00	
154462	154462					
	Fill	0	0	0	1.00	40469
113993	113993					
	TOPSOIL					

19232	19232	Excavation	56	114	114	1.00	
0	0	Fill	0	0	0	1.00	40469

Mass ordinate for TOPSOIL = 19232

561+00.00	EARTH						
154567	154567	Excavation	3	105	105	1.00	
114152	114152	Fill	172	159	159	1.00	40415
		TOPSOIL					
19288	19288	Excavation	5	56	56	1.00	
0	0	Fill	0	0	0	1.00	40415

Mass ordinate for TOPSOIL = 19288

561+50.00	EARTH						
154570	154570	Excavation	0	3	3	1.00	
114778	114778	Fill	504	626	626	1.00	39792
		TOPSOIL					
19293	19293	Excavation	0	5	5	1.00	
0	0	Fill	0	0	0	1.00	39792

Mass ordinate for TOPSOIL = 19293

562+00.00	EARTH						
154570	154570	Excavation	0	0	0	1.00	
116020	116020	Fill	837	1242	1242	1.00	38550

562+50.00	EARTH						
154572	154572	Excavation	2	2	2	1.00	
117797	117797	Fill	1082	1777	1777	1.00	36775
		TOPSOIL					
19297	19297	Excavation	4	4	4	1.00	
0	0	Fill	0	0	0	1.00	36775

Mass ordinate for TOPSOIL = 19297

563+00.00	EARTH						
		Excavation	8	9	9	1.00	

154581	154581						
		Fill	997	1925	1925	1.00	34859
119722	119722						
		TOPSOIL					
		Excavation	7	10	10	1.00	
19307	19307						
		Fill	0	0	0	1.00	34859
0	0						
		Mass ordinate for TOPSOIL = 19307					

		563+50.00 EARTH					
		Excavation	10	17	17	1.00	
154598	154598						
		Fill	890	1747	1747	1.00	33129
121469	121469						
		TOPSOIL					
		Excavation	8	14	14	1.00	
19321	19321						
		Fill	0	0	0	1.00	33129
0	0						
		Mass ordinate for TOPSOIL = 19321					

		564+00.00 EARTH					
		Excavation	0	9	9	1.00	
154607	154607						
		Fill	662	1437	1437	1.00	31701
122906	122906						
		TOPSOIL					
		Excavation	0	7	7	1.00	
19328	19328						
		Fill	0	0	0	1.00	31701
0	0						
		Mass ordinate for TOPSOIL = 19328					

		564+50.00 EARTH					
		Excavation	64	59	59	1.00	
154666	154666						
		Fill	245	840	840	1.00	30920
123746	123746						
		TOPSOIL					
		Excavation	19	18	18	1.00	
19346	19346						
		Fill	0	0	0	1.00	30920
0	0						
		Mass ordinate for TOPSOIL = 19346					

		564+87.13 EARTH					
		Excavation	175	164	164	1.00	
154830	154830						
		Fill	75	220	220	1.00	30864

123966	123966					
	TOPSOIL					
	Excavation	45	44	44	1.00	
19390	19390					
	Fill	0	0	0	1.00	30864
0	0					
	Mass ordinate for TOPSOIL = 19390					
565+00.00 EARTH						
	Excavation	214	93	93	1.00	
154923	154923					
	Fill	37	27	27	1.00	30930
123993	123993					
	TOPSOIL					
	Excavation	51	23	23	1.00	
19413	19413					
	Fill	0	0	0	1.00	30930
0	0					
	Mass ordinate for TOPSOIL = 19413					
565+50.00 EARTH						
	Excavation	385	555	555	1.00	
155478	155478					
	Fill	0	34	34	1.00	31451
124027	124027					
	TOPSOIL					
	Excavation	72	114	114	1.00	
19527	19527					
	Fill	0	0	0	1.00	31451
0	0					
	Mass ordinate for TOPSOIL = 19527					
566+00.00 EARTH						
	Excavation	328	660	660	1.00	
156138	156138					
	Fill	0	0	0	1.00	32111
124027	124027					
	TOPSOIL					
	Excavation	67	129	129	1.00	
19656	19656					
	Fill	0	0	0	1.00	32111
0	0					
	Mass ordinate for TOPSOIL = 19656					
566+50.00 EARTH						
	Excavation	353	631	631	1.00	
156769	156769					
	Fill	0	0	0	1.00	32742
124027	124027					
	TOPSOIL					

		Excavation	67	124	124	1.00	
19780	19780						
		Fill	0	0	0	1.00	32742
0	0						

Mass ordinate for TOPSOIL = 19780

566+62.13 EARTH							
		Excavation	374	163	163	1.00	
156932	156932						
		Fill	0	0	0	1.00	32905
124027	124027						
		TOPSOIL					
		Excavation	68	30	30	1.00	
19810	19810						
		Fill	0	0	0	1.00	32905
0	0						

Mass ordinate for TOPSOIL = 19810

567+00.00 EARTH							
		Excavation	430	564	564	1.00	
157496	157496						
		Fill	0	0	0	1.00	33469
124027	124027						
		TOPSOIL					
		Excavation	69	96	96	1.00	
19906	19906						
		Fill	0	0	0	1.00	33469
0	0						

Mass ordinate for TOPSOIL = 19906

567+50.00 EARTH							
		Excavation	499	860	860	1.00	
158356	158356						
		Fill	0	0	0	1.00	34329
124027	124027						
		TOPSOIL					
		Excavation	71	130	130	1.00	
20036	20036						
		Fill	0	0	0	1.00	34329
0	0						

Mass ordinate for TOPSOIL = 20036

568+00.00 EARTH							
		Excavation	596	1014	1014	1.00	
159370	159370						
		Fill	0	0	0	1.00	35343
124027	124027						
		TOPSOIL					
		Excavation	73	133	133	1.00	
20169	20169						

0	0	Fill	0	0	0	1.00	35343
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Mass ordinate for TOPSOIL = 20169

568+50.00 EARTH

		Excavation	682	1183	1183	1.00	
160553	160553						
		Fill	0	0	0	1.00	36526

124027	124027	TOPSOIL					
		Excavation	76	138	138	1.00	

20307	20307						
		Fill	0	0	0	1.00	36526

0	0						
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Mass ordinate for TOPSOIL = 20307

568+88.03 EARTH

		Excavation	800	1044	1044	1.00	
161597	161597						
		Fill	0	0	0	1.00	37570

124027	124027	TOPSOIL					
		Excavation	79	109	109	1.00	

20416	20416						
		Fill	0	0	0	1.00	37570

0	0						
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Mass ordinate for TOPSOIL = 20416

569+00.00 EARTH

		Excavation	830	361	361	1.00	
161958	161958						
		Fill	0	0	0	1.00	37931

124027	124027	TOPSOIL					
		Excavation	79	35	35	1.00	

20451	20451						
		Fill	0	0	0	1.00	37931

0	0						
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Mass ordinate for TOPSOIL = 20451

569+50.00 EARTH

		Excavation	873	1577	1577	1.00	
163535	163535						
		Fill	0	0	0	1.00	39508

124027	124027	TOPSOIL					
		Excavation	78	145	145	1.00	

20596	20596						
		Fill	0	0	0	1.00	39508

0	0						
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Mass ordinate for TOPSOIL = 20596

570+00.00 EARTH

		Excavation	603	1367	1367	1.00	
164902	164902						
		Fill	0	0	0	1.00	40875
124027	124027						
		TOPSOIL					
		Excavation	45	114	114	1.00	
20710	20710						
		Fill	0	0	0	1.00	40875
0	0						

Mass ordinate for TOPSOIL = 20710

570+50.00 EARTH

		Excavation	853	1348	1348	1.00	
166250	166250						
		Fill	0	0	0	1.00	42223
124027	124027						
		TOPSOIL					
		Excavation	76	112	112	1.00	
20822	20822						
		Fill	0	0	0	1.00	42223
0	0						

Mass ordinate for TOPSOIL = 20822

570+63.03 EARTH

		Excavation	846	410	410	1.00	
166660	166660						
		Fill	0	0	0	1.00	42633
124027	124027						
		TOPSOIL					
		Excavation	76	37	37	1.00	
20859	20859						
		Fill	0	0	0	1.00	42633
0	0						

Mass ordinate for TOPSOIL = 20859

571+00.00 EARTH

		Excavation	749	1092	1092	1.00	
167752	167752						
		Fill	0	0	0	1.00	43725
124027	124027						
		TOPSOIL					
		Excavation	73	102	102	1.00	
20961	20961						
		Fill	0	0	0	1.00	43725
0	0						

Mass ordinate for TOPSOIL = 20961

571+50.00 EARTH						
	Excavation	590	1240	1240	1.00	
168992	168992					
	Fill	0	0	0	1.00	44965
124027	124027					
	TOPSOIL					
	Excavation	67	130	130	1.00	
21091	21091					
	Fill	0	0	0	1.00	44965
0	0					

Mass ordinate for TOPSOIL = 21091

572+00.00 EARTH						
	Excavation	460	972	972	1.00	
169964	169964					
	Fill	0	0	0	1.00	45937
124027	124027					
	TOPSOIL					
	Excavation	62	119	119	1.00	
21210	21210					
	Fill	0	0	0	1.00	45937
0	0					

Mass ordinate for TOPSOIL = 21210

572+50.00 EARTH						
	Excavation	435	829	829	1.00	
170793	170793					
	Fill	0	0	0	1.00	46766
124027	124027					
	TOPSOIL					
	Excavation	47	101	101	1.00	
21311	21311					
	Fill	0	0	0	1.00	46766
0	0					

Mass ordinate for TOPSOIL = 21311

572+87.58 EARTH						
	Excavation	249	476	476	1.00	
171269	171269					
	Fill	12	8	8	1.00	47234
124035	124035					
	TOPSOIL					
	Excavation	55	71	71	1.00	
21382	21382					
	Fill	0	0	0	1.00	47234
0	0					

Mass ordinate for TOPSOIL = 21382

573+00.00 EARTH						
	Excavation	220	108	108	1.00	

171377	171377					
		Fill	5	4	4	1.00 47338
124039	124039					
		TOPSOIL				
		Excavation	51	24	24	1.00
21406	21406					
		Fill	0	0	0	1.00 47338
0	0					
		Mass ordinate for TOPSOIL = 21406				

		573+50.00 EARTH				
		Excavation	206	394	394	1.00
171771	171771					
		Fill	57	57	57	1.00 47675
124096	124096					
		TOPSOIL				
		Excavation	34	79	79	1.00
21485	21485					
		Fill	0	0	0	1.00 47675
0	0					
		Mass ordinate for TOPSOIL = 21485				

		574+00.00 EARTH				
		Excavation	198	374	374	1.00
172145	172145					
		Fill	93	139	139	1.00 47910
124235	124235					
		TOPSOIL				
		Excavation	34	63	63	1.00
21548	21548					
		Fill	0	0	0	1.00 47910
0	0					
		Mass ordinate for TOPSOIL = 21548				

		574+50.00 EARTH				
		Excavation	177	347	347	1.00
172492	172492					
		Fill	13	98	98	1.00 48159
124333	124333					
		TOPSOIL				
		Excavation	34	63	63	1.00
21611	21611					
		Fill	0	0	0	1.00 48159
0	0					
		Mass ordinate for TOPSOIL = 21611				

		574+62.58 EARTH				
		Excavation	191	86	86	1.00
172578	172578					
		Fill	48	14	14	1.00 48231

124347	124347					
	TOPSOIL					
	Excavation	37	17	17	1.00	
21628	21628					
	Fill	0	0	0	1.00	48231
0	0					
	Mass ordinate for TOPSOIL = 21628					
575+00.00 EARTH						
	Excavation	318	353	353	1.00	
172931	172931					
	Fill	0	33	33	1.00	48551
124380	124380					
	TOPSOIL					
	Excavation	67	72	72	1.00	
21700	21700					
	Fill	0	0	0	1.00	48551
0	0					
	Mass ordinate for TOPSOIL = 21700					
575+50.00 EARTH						
	Excavation	226	504	504	1.00	
173435	173435					
	Fill	0	0	0	1.00	49055
124380	124380					
	TOPSOIL					
	Excavation	58	116	116	1.00	
21816	21816					
	Fill	0	0	0	1.00	49055
0	0					
	Mass ordinate for TOPSOIL = 21816					
576+00.00 EARTH						
	Excavation	260	450	450	1.00	
173885	173885					
	Fill	0	0	0	1.00	49505
124380	124380					
	TOPSOIL					
	Excavation	64	113	113	1.00	
21929	21929					
	Fill	0	0	0	1.00	49505
0	0					
	Mass ordinate for TOPSOIL = 21929					
576+50.00 EARTH						
	Excavation	572	770	770	1.00	
174655	174655					
	Fill	0	0	0	1.00	50275
124380	124380					
	TOPSOIL					

22055	22055	Excavation	72	126	126	1.00	
0	0	Fill	0	0	0	1.00	50275

Mass ordinate for TOPSOIL = 22055

576+88.48 EARTH

175670	175670	Excavation	852	1015	1015	1.00	
124380	124380	Fill	0	0	0	1.00	51290
		TOPSOIL					
22162	22162	Excavation	78	107	107	1.00	
0	0	Fill	0	0	0	1.00	51290

Mass ordinate for TOPSOIL = 22162

577+00.00 EARTH

176053	176053	Excavation	943	383	383	1.00	
124380	124380	Fill	0	0	0	1.00	51673
		TOPSOIL					
22196	22196	Excavation	80	34	34	1.00	
0	0	Fill	0	0	0	1.00	51673

Mass ordinate for TOPSOIL = 22196

577+50.00 EARTH

178099	178099	Excavation	1267	2046	2046	1.00	
124380	124380	Fill	0	0	0	1.00	53719
		TOPSOIL					
22349	22349	Excavation	85	153	153	1.00	
0	0	Fill	0	0	0	1.00	53719

Mass ordinate for TOPSOIL = 22349

578+00.00 EARTH

180418	180418	Excavation	1237	2319	2319	1.00	
124380	124380	Fill	0	0	0	1.00	56038
		TOPSOIL					
22504	22504	Excavation	82	155	155	1.00	

0	0	Fill	0	0	0	1.00	56038
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Mass ordinate for TOPSOIL = 22504

578+50.00 EARTH

182492	182492	Excavation	1003	2074	2074	1.00	
124380	124380	Fill	0	0	0	1.00	58112

TOPSOIL

22654	22654	Excavation	80	150	150	1.00	
0	0	Fill	0	0	0	1.00	58112

Mass ordinate for TOPSOIL = 22654

578+63.48 EARTH

182976	182976	Excavation	936	484	484	1.00	
124380	124380	Fill	0	0	0	1.00	58596

TOPSOIL

22694	22694	Excavation	79	40	40	1.00	
0	0	Fill	0	0	0	1.00	58596

Mass ordinate for TOPSOIL = 22694

579+00.00 EARTH

184161	184161	Excavation	816	1185	1185	1.00	
124380	124380	Fill	0	0	0	1.00	59781

TOPSOIL

22801	22801	Excavation	79	107	107	1.00	
0	0	Fill	0	0	0	1.00	59781

Mass ordinate for TOPSOIL = 22801

579+50.00 EARTH

185568	185568	Excavation	704	1407	1407	1.00	
124380	124380	Fill	0	0	0	1.00	61188

TOPSOIL

22947	22947	Excavation	79	146	146	1.00	
0	0	Fill	0	0	0	1.00	61188

Mass ordinate for TOPSOIL = 22947

580+00.00 EARTH						
	Excavation	619	1225	1225	1.00	
186793	186793					
	Fill	0	0	0	1.00	62413
124380	124380					
TOPSOIL						
	Excavation	78	145	145	1.00	
23092	23092					
	Fill	0	0	0	1.00	62413
0	0					

Mass ordinate for TOPSOIL = 23092

580+50.00 EARTH						
	Excavation	475	1013	1013	1.00	
187806	187806					
	Fill	0	0	0	1.00	63426
124380	124380					
TOPSOIL						
	Excavation	75	142	142	1.00	
23234	23234					
	Fill	0	0	0	1.00	63426
0	0					

Mass ordinate for TOPSOIL = 23234

581+00.00 EARTH						
	Excavation	258	679	679	1.00	
188485	188485					
	Fill	0	0	0	1.00	64105
124380	124380					
TOPSOIL						
	Excavation	66	131	131	1.00	
23365	23365					
	Fill	0	0	0	1.00	64105
0	0					

Mass ordinate for TOPSOIL = 23365

581+35.50 EARTH						
	Excavation	168	280	280	1.00	
188765	188765					
	Fill	0	0	0	1.00	64385
124380	124380					
TOPSOIL						
	Excavation	65	86	86	1.00	
23451	23451					
	Fill	0	0	0	1.00	64385
0	0					

Mass ordinate for TOPSOIL = 23451

REGION = 2

580+50.00 EARTH

		Excavation	170	313	313	1.00	
189078	189078						
		Fill	0	0	0	1.00	64698
124380	124380						
		TOPSOIL					
		Excavation	63	119	119	1.00	
23570	23570						
		Fill	0	0	0	1.00	64698
0	0						

Mass ordinate for TOPSOIL = 23570

581+00.00 EARTH

		Excavation	167	312	312	1.00	
189390	189390						
		Fill	0	0	0	1.00	65010
124380	124380						
		TOPSOIL					
		Excavation	44	99	99	1.00	
23669	23669						
		Fill	0	0	0	1.00	65010
0	0						

Mass ordinate for TOPSOIL = 23669

581+50.00 EARTH

		Excavation	470	590	590	1.00	
189980	189980						
		Fill	0	0	0	1.00	65600
124380	124380						
		TOPSOIL					
		Excavation	80	115	115	1.00	
23784	23784						
		Fill	0	0	0	1.00	65600
0	0						

Mass ordinate for TOPSOIL = 23784

582+00.00 EARTH

		Excavation	489	888	888	1.00	
190868	190868						
		Fill	0	0	0	1.00	66488
124380	124380						
		TOPSOIL					
		Excavation	81	149	149	1.00	
23933	23933						
		Fill	0	0	0	1.00	66488
0	0						

Mass ordinate for TOPSOIL = 23933

582+50.00 EARTH

		Excavation	312	742	742	1.00	
191610	191610						
		Fill	12	11	11	1.00	67219
124391	124391						
		TOPSOIL					
		Excavation	60	131	131	1.00	
24064	24064						
		Fill	0	0	0	1.00	67219
0	0						
		Mass ordinate for TOPSOIL = 24064					

583+00.00 EARTH							
		Excavation	192	467	467	1.00	
192077	192077						
		Fill	211	206	206	1.00	67480
124597	124597						
		TOPSOIL					
		Excavation	31	84	84	1.00	
24148	24148						
		Fill	0	0	0	1.00	67480
0	0						
		Mass ordinate for TOPSOIL = 24148					

583+50.00 EARTH							
		Excavation	78	250	250	1.00	
192327	192327						
		Fill	494	653	653	1.00	67077
125250	125250						
		TOPSOIL					
		Excavation	18	45	45	1.00	
24193	24193						
		Fill	0	0	0	1.00	67077
0	0						
		Mass ordinate for TOPSOIL = 24193					

584+00.00 EARTH							
		Excavation	4	76	76	1.00	
192403	192403						
		Fill	842	1237	1237	1.00	65916
126487	126487						
		TOPSOIL					
		Excavation	5	21	21	1.00	
24214	24214						
		Fill	0	0	0	1.00	65916
0	0						
		Mass ordinate for TOPSOIL = 24214					

584+50.00 EARTH							
		Excavation	0	4	4	1.00	
192407	192407						

		Fill	884	1598	1598	1.00	64322
128085	128085	TOPSOIL					
		Excavation	0	5	5	1.00	
24219	24219						
		Fill	0	0	0	1.00	64322
0	0						
Mass ordinate for TOPSOIL = 24219							
585+00.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	834	1591	1591	1.00	62731
129676	129676						
585+50.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	702	1422	1422	1.00	61309
131098	131098						
586+00.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	483	1097	1097	1.00	60212
132195	132195						
586+50.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	360	781	781	1.00	59431
132976	132976						
587+00.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	314	624	624	1.00	58807
133600	133600						
587+17.91 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	323	211	211	1.00	58596
133811	133811						
587+50.00 EARTH							
		Excavation	0	0	0	1.00	
192407	192407						
		Fill	399	429	429	1.00	58167
134240	134240						

588+00.00 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	695	1013	1013	1.00	57154
135253	135253					
588+50.00 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	1034	1601	1601	1.00	55553
136854	136854					
589+00.00 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	1120	1994	1994	1.00	53559
138848	138848					
589+00.06 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	1120	3	3	1.00	53556
138851	138851					
589+50.00 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	1070	2026	2026	1.00	51530
140877	140877					
589+72.91 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	955	859	859	1.00	50671
141736	141736					
590+00.00 EARTH						
	Excavation	0	0	0	1.00	
192407	192407					
	Fill	756	858	858	1.00	49813
142594	142594					
590+50.00 EARTH						
	Excavation	12	11	11	1.00	
192418	192418					
	Fill	373	1045	1045	1.00	48779
143639	143639					
	TOPSOIL					
	Excavation	8	7	7	1.00	

24226	24226						
		Fill	0	0	0	1.00	48779
0	0						

Mass ordinate for TOPSOIL = 24226

591+00.00 EARTH							
		Excavation	65	71	71	1.00	
192489	192489						
		Fill	62	403	403	1.00	48447
144042	144042						
		TOPSOIL					
		Excavation	22	28	28	1.00	
24254	24254						
		Fill	0	0	0	1.00	48447
0	0						

Mass ordinate for TOPSOIL = 24254

591+50.00 EARTH							
		Excavation	229	272	272	1.00	
192761	192761						
		Fill	0	57	57	1.00	48662
144099	144099						
		TOPSOIL					
		Excavation	65	81	81	1.00	
24335	24335						
		Fill	0	0	0	1.00	48662
0	0						

Mass ordinate for TOPSOIL = 24335

592+00.00 EARTH							
		Excavation	439	619	619	1.00	
193380	193380						
		Fill	0	0	0	1.00	49281
144099	144099						
		TOPSOIL					
		Excavation	69	124	124	1.00	
24459	24459						
		Fill	0	0	0	1.00	49281
0	0						

Mass ordinate for TOPSOIL = 24459

592+50.00 EARTH							
		Excavation	630	990	990	1.00	
194370	194370						
		Fill	0	0	0	1.00	50271
144099	144099						
		TOPSOIL					
		Excavation	0	64	64	1.00	
24523	24523						
		Fill	0	0	0	1.00	50271

0	0	Mass ordinate for TOPSOIL = 24523				
593+00.00 EARTH						
		Excavation	670	1204	1204	1.00
195574	195574					
		Fill	0	0	0	1.00 51475
144099	144099					
		TOPSOIL				
		Excavation	78	72	72	1.00
24595	24595					
		Fill	0	0	0	1.00 51475
0	0	Mass ordinate for TOPSOIL = 24595				
593+50.00 EARTH						
		Excavation	566	1144	1144	1.00
196718	196718					
		Fill	0	0	0	1.00 52619
144099	144099					
		TOPSOIL				
		Excavation	74	141	141	1.00
24736	24736					
		Fill	0	0	0	1.00 52619
0	0	Mass ordinate for TOPSOIL = 24736				
594+00.00 EARTH						
		Excavation	476	965	965	1.00
197683	197683					
		Fill	0	0	0	1.00 53584
144099	144099					
		TOPSOIL				
		Excavation	70	133	133	1.00
24869	24869					
		Fill	0	0	0	1.00 53584
0	0	Mass ordinate for TOPSOIL = 24869				
594+50.00 EARTH						
		Excavation	515	918	918	1.00
198601	198601					
		Fill	4	4	4	1.00 54498
144103	144103					
		TOPSOIL				
		Excavation	61	121	121	1.00
24990	24990					
		Fill	0	0	0	1.00 54498
0	0	Mass ordinate for TOPSOIL = 24990				

595+00.00 EARTH						
	Excavation	584	1018	1018	1.00	
199619	199619					
	Fill	0	4	4	1.00	55512
144107	144107					
	TOPSOIL					
	Excavation	68	119	119	1.00	
25109	25109					
	Fill	0	0	0	1.00	55512
0	0					

Mass ordinate for TOPSOIL = 25109

595+50.00 EARTH						
	Excavation	605	1101	1101	1.00	
200720	200720					
	Fill	0	0	0	1.00	56613
144107	144107					
	TOPSOIL					
	Excavation	64	122	122	1.00	
25231	25231					
	Fill	0	0	0	1.00	56613
0	0					

Mass ordinate for TOPSOIL = 25231

596+00.00 EARTH						
	Excavation	716	1223	1223	1.00	
201943	201943					
	Fill	53	49	49	1.00	57787
144156	144156					
	TOPSOIL					
	Excavation	63	118	118	1.00	
25349	25349					
	Fill	0	0	0	1.00	57787
0	0					

Mass ordinate for TOPSOIL = 25349

596+50.00 EARTH						
	Excavation	671	1284	1284	1.00	
203227	203227					
	Fill	308	334	334	1.00	58737
144490	144490					
	TOPSOIL					
	Excavation	56	110	110	1.00	
25459	25459					
	Fill	0	0	0	1.00	58737
0	0					

Mass ordinate for TOPSOIL = 25459

597+00.00 EARTH

		Excavation	73	689	689	1.00	
203916	203916						
		Fill	1146	1346	1346	1.00	58080
145836	145836						
		TOPSOIL					
		Excavation	23	73	73	1.00	
25532	25532						
		Fill	0	0	0	1.00	58080
0	0						
		Mass ordinate for TOPSOIL = 25532					

597+50.00 EARTH

		Excavation	0	68	68	1.00	
203984	203984						
		Fill	1512	2461	2461	1.00	55687
148297	148297						
		TOPSOIL					
		Excavation	0	21	21	1.00	
25553	25553						
		Fill	0	0	0	1.00	55687
0	0						
		Mass ordinate for TOPSOIL = 25553					

598+00.00 EARTH

		Excavation	58	54	54	1.00	
204038	204038						
		Fill	942	2272	2272	1.00	53469
150569	150569						
		TOPSOIL					
		Excavation	25	23	23	1.00	
25576	25576						
		Fill	0	0	0	1.00	53469
0	0						
		Mass ordinate for TOPSOIL = 25576					

598+50.00 EARTH

		Excavation	337	366	366	1.00	
204404	204404						
		Fill	320	1169	1169	1.00	52666
151738	151738						
		TOPSOIL					
		Excavation	43	63	63	1.00	
25639	25639						
		Fill	0	0	0	1.00	52666
0	0						
		Mass ordinate for TOPSOIL = 25639					

599+00.00 EARTH

		Excavation	521	794	794	1.00	
205198	205198						

		Fill	128	415	415	1.00	53045
152153	152153	TOPSOIL					
		Excavation	48	84	84	1.00	
25723	25723						
		Fill	0	0	0	1.00	53045
0	0						

Mass ordinate for TOPSOIL = 25723

599+50.00 EARTH

		Excavation	661	1094	1094	1.00	
206292	206292						
		Fill	203	306	306	1.00	53833
152459	152459	TOPSOIL					
		Excavation	53	94	94	1.00	
25817	25817						
		Fill	0	0	0	1.00	53833
0	0						

Mass ordinate for TOPSOIL = 25817

600+00.00 EARTH

		Excavation	675	1237	1237	1.00	
207529	207529						
		Fill	172	347	347	1.00	54723
152806	152806	TOPSOIL					
		Excavation	59	104	104	1.00	
25921	25921						
		Fill	0	0	0	1.00	54723
0	0						

Mass ordinate for TOPSOIL = 25921

600+50.00 EARTH

		Excavation	582	1164	1164	1.00	
208693	208693						
		Fill	75	229	229	1.00	55658
153035	153035	TOPSOIL					
		Excavation	56	106	106	1.00	
26027	26027						
		Fill	0	0	0	1.00	55658
0	0						

Mass ordinate for TOPSOIL = 26027

601+00.00 EARTH

		Excavation	446	952	952	1.00	
209645	209645						
		Fill	3	72	72	1.00	56538
153107	153107						

		TOPSOIL				
		Excavation	51	99	99	1.00
26126	26126					
		Fill	0	0	0	1.00 56538
0	0					

Mass ordinate for TOPSOIL = 26126

		601+50.00 EARTH				
		Excavation	220	617	617	1.00
210262	210262					
		Fill	15	17	17	1.00 57138
153124	153124					
		TOPSOIL				
		Excavation	41	85	85	1.00
26211	26211					
		Fill	0	0	0	1.00 57138
0	0					

Mass ordinate for TOPSOIL = 26211

		602+00.00 EARTH				
		Excavation	31	232	232	1.00
210494	210494					
		Fill	70	79	79	1.00 57291
153203	153203					
		TOPSOIL				
		Excavation	22	58	58	1.00
26269	26269					
		Fill	0	0	0	1.00 57291
0	0					

Mass ordinate for TOPSOIL = 26269

		602+43.90 EARTH				
		Excavation	0	25	25	1.00
210519	210519					
		Fill	413	393	393	1.00 56923
153596	153596					
		TOPSOIL				
		Excavation	0	18	18	1.00
26287	26287					
		Fill	0	0	0	1.00 56923
0	0					

Mass ordinate for TOPSOIL = 26287

		602+50.00 EARTH				
		Excavation	0	0	0	1.00
210519	210519					
		Fill	674	123	123	1.00 56800
153719	153719					

603+00.00 EARTH

		Excavation	0	0	0	1.00	
210519	210519						
		Fill	1850	2337	2337	1.00	54463
156056	156056						
603+16.75 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	2172	1247	1247	1.00	53216
157303	157303						
603+50.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	2488	2869	2869	1.00	50347
160172	160172						
604+00.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	2566	4680	4680	1.00	45667
164852	164852						
604+50.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	1586	3844	3844	1.00	41823
168696	168696						
604+98.90 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	1481	2777	2777	1.00	39046
171473	171473						
605+00.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	1487	61	61	1.00	38985
171534	171534						
605+50.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						
		Fill	1207	2494	2494	1.00	36491
174028	174028						
606+00.00 EARTH							
		Excavation	0	0	0	1.00	
210519	210519						

		Fill	514	1594	1594	1.00	34897
175622	175622						
606+50.00 EARTH							
		Excavation	202	187	187	1.00	
210706	210706						
		Fill	0	476	476	1.00	34608
176098	176098						

606+60.00 EARTH							
		Excavation	370	106	106	1.00	
210812	210812						
		Fill	0	0	0	1.00	34714
176098	176098						

↑		G R A N D S U M M A R Y T O T A L S					
		Material Name		Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	

		EARTH					
		Excavation		210812	210812	1.00	
		Fill		176098	176098	1.00	
		TOPSOIL					
		Excavation		26287	26287	1.00	
		Fill		0	0	1.00	
↑		S P L I T S U M M A R Y T O T A L S					

				XS Quant	XS Quant	Add/Sub Quant	Add/Sub
Quant		Material Name		Unadjusted	Adjusted	Unadjusted	Adjusted
Mult				Volume	Volume	Volume	Volume
Factor				(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH							
		Excavation		210812	210812		0
0	1.00						
		Fill		176098	176098		0
0	1.00						
TOPSOIL							
		Excavation		26287	26287		0
0	1.00						
		Fill		0	0		0
0	1.00						

↑		B A L A N C E P O I N T S U M M A R Y					
		Material Name		Cumulative		Incremental	
Mult							

Factor			Unadjusted	Adjusted	Unadjusted	Adjusted
			Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)
-----			-----	-----	-----	-----
Station = 433+77.11, Region 1						
EARTH						
1.00		Excavation	601	601	601	601
		Fill	601	601	601	601
TOPSOIL						
1.00		Excavation	218	218	218	218
		Fill	0	0	0	0
Station = 441+34.18, Region 1						
EARTH						
1.00		Excavation	4045	4045	3444	3444
		Fill	4045	4045	3444	3444
TOPSOIL						
1.00		Excavation	1163	1163	945	945
		Fill	0	0	0	0
Station = 443+75.23, Region 1						
EARTH						
1.00		Excavation	4934	4934	889	889
		Fill	4934	4934	889	889
TOPSOIL						
1.00		Excavation	1365	1365	202	202
		Fill	0	0	0	0
Station = 455+82.21, Region 1						
EARTH						
1.00		Excavation	17656	17656	12722	12722
		Fill	17656	17656	12722	12722
TOPSOIL						
1.00		Excavation	2859	2859	1494	1494
		Fill	0	0	0	0

Station = 493+01.62, Region 1						
EARTH						
	Excavation	80237	80237	62581	62581	
1.00						
	Fill	80237	80237	62581	62581	
1.00						
TOPSOIL						
	Excavation	8047	8047	5188	5188	
1.00						
	Fill	0	0	0	0	
1.00						
Station = 497+29.77, Region 1						
EARTH						
	Excavation	86416	86416	6179	6179	
1.00						
	Fill	86416	86416	6179	6179	
1.00						
TOPSOIL						
	Excavation	8666	8666	619	619	
1.00						
	Fill	0	0	0	0	
1.00						
Station = 502+73.51, Region 1						
EARTH						
	Excavation	91105	91105	4689	4689	
1.00						
	Fill	91105	91105	4689	4689	
1.00						
TOPSOIL						
	Excavation	9314	9314	648	648	
1.00						
	Fill	0	0	0	0	
1.00						

Input File: ewkprj.inp

Output File: Earthwork_Extension.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\CUSR028XSectionsProjectExtension.DGN
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_Earth_Extension.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = MAINLINE
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 587+17.91 R 2
1    81    81          end sta = 606+00.00 R 2
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = MAINLINE

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

REGION = 2

587+17.91 EARTH						
	Excavation	0.00	0	0	0.85	
0	0					
	Fill	384.72	0	0	1.00	0
0	0					
TOPSOIL						
	Excavation	55.18	0	0	1.00	
0	0					
	Fill	0.00	0	0	1.00	0
0	0					
Mass ordinate for TOPSOIL = 0						

587+50.00 EARTH						
	Excavation	0.00	0	0	0.85	
0	0					
	Fill	463.01	504	504	1.00	-504
504	504					
TOPSOIL						
	Excavation	57.67	67	67	1.00	
67	67					
	Fill	0.00	0	0	1.00	-504
0	0					
Mass ordinate for TOPSOIL = 67						

588+00.00 EARTH						
	Excavation	0.00	0	0	0.85	
0	0					
	Fill	766.27	1138	1138	1.00	-1642
1642	1642					
TOPSOIL						
	Excavation	65.56	114	114	1.00	
181	181					
	Fill	0.00	0	0	1.00	-1642
0	0					
Mass ordinate for TOPSOIL = 181						

588+50.00 EARTH						
	Excavation	0.00	0	0	0.85	
0	0					
	Fill	1066.46	1697	1697	1.00	-3339
3339	3339					
TOPSOIL						
	Excavation	70.27	126	126	1.00	
307	307					
	Fill	0.00	0	0	1.00	-3339
0	0					
Mass ordinate for TOPSOIL = 307						

589+00.00 EARTH						
	Excavation	0.00	0	0	0.85	

0	0						
		Fill	1150.06	2052	2052	1.00	-5391
5391	5391	TOPSOIL					
		Excavation	73.77	133	133	1.00	
440	440						
		Fill	0.00	0	0	1.00	-5391
0	0						
		Mass ordinate for TOPSOIL = 440					
589+00.06		EARTH					
		Excavation	0.00	0	0	0.85	
0	0						
		Fill	1149.96	3	3	1.00	-5394
5394	5394	TOPSOIL					
		Excavation	73.77	0	0	1.00	
440	440						
		Fill	0.00	0	0	1.00	-5394
0	0						
		Mass ordinate for TOPSOIL = 440					
589+50.00		EARTH					
		Excavation	0.00	0	0	0.85	
0	0						
		Fill	1096.56	2078	2078	1.00	-7472
7472	7472	TOPSOIL					
		Excavation	70.45	133	133	1.00	
573	573						
		Fill	0.00	0	0	1.00	-7472
0	0						
		Mass ordinate for TOPSOIL = 573					
589+72.91		EARTH					
		Excavation	0.00	0	0	0.85	
0	0						
		Fill	981.25	882	882	1.00	-8354
8354	8354	TOPSOIL					
		Excavation	67.40	58	58	1.00	
631	631						
		Fill	0.00	0	0	1.00	-8354
0	0						
		Mass ordinate for TOPSOIL = 631					
590+00.00		EARTH					
		Excavation	0.00	0	0	0.85	
0	0						
		Fill	789.46	888	888	1.00	-9242

9242	9242						
	TOPSOIL						
	Excavation	60.73	64	64	1.00		
695	695						
	Fill	0.00	0	0	1.00	-9242	
0	0						
	Mass ordinate for TOPSOIL = 695						
590+50.00	EARTH						
	Excavation	0.00	0	0	0.85		
0	0						
	Fill	448.75	1146	1146	1.00	-10388	
10388	10388						
	TOPSOIL						
	Excavation	53.81	106	106	1.00		
801	801						
	Fill	0.00	0	0	1.00	-10388	
0	0						
	Mass ordinate for TOPSOIL = 801						
591+00.00	EARTH						
	Excavation	15.46	14	12	0.85		
14	12						
	Fill	107.59	515	515	1.00	-10891	
10903	10903						
	TOPSOIL						
	Excavation	52.63	98	98	1.00		
899	899						
	Fill	0.00	0	0	1.00	-10891	
0	0						
	Mass ordinate for TOPSOIL = 899						
591+50.00	EARTH						
	Excavation	182.33	183	156	0.85		
197	168						
	Fill	1.05	101	101	1.00	-10836	
11004	11004						
	TOPSOIL						
	Excavation	62.46	106	106	1.00		
1005	1005						
	Fill	0.00	0	0	1.00	-10836	
0	0						
	Mass ordinate for TOPSOIL = 1005						
592+00.00	EARTH						
	Excavation	432.61	569	484	0.85		
766	652						
	Fill	1.07	2	2	1.00	-10354	
11006	11006						
	TOPSOIL						

		Excavation	69.63	122	122	1.00	
1127	1127						
		Fill	0.00	0	0	1.00	-10354
0	0						

Mass ordinate for TOPSOIL = 1127

592+50.00 EARTH

		Excavation	822.17	1162	988	0.85	
1928	1640						
		Fill	0.65	2	2	1.00	-9368
11008	11008						
		TOPSOIL					
		Excavation	25.30	88	88	1.00	
1215	1215						
		Fill	0.00	0	0	1.00	-9368
0	0						

Mass ordinate for TOPSOIL = 1215

593+00.00 EARTH

		Excavation	658.80	1371	1166	0.85	
3299	2806						
		Fill	0.94	1	1	1.00	-8203
11009	11009						
		TOPSOIL					
		Excavation	78.88	96	96	1.00	
1311	1311						
		Fill	0.00	0	0	1.00	-8203
0	0						

Mass ordinate for TOPSOIL = 1311

593+50.00 EARTH

		Excavation	558.93	1128	958	0.85	
4427	3764						
		Fill	0.96	2	2	1.00	-7247
11011	11011						
		TOPSOIL					
		Excavation	74.91	143	143	1.00	
1454	1454						
		Fill	0.00	0	0	1.00	-7247
0	0						

Mass ordinate for TOPSOIL = 1454

594+00.00 EARTH

		Excavation	475.51	958	814	0.85	
5385	4578						
		Fill	0.88	2	2	1.00	-6435
11013	11013						
		TOPSOIL					
		Excavation	71.65	136	136	1.00	
1590	1590						

		Fill	0.00	0	0	1.00	-6435
0	0						
		Mass ordinate for TOPSOIL = 1590					
594+50.00 EARTH							
		Excavation	509.30	912	775	0.85	
6297	5353						
		Fill	6.86	7	7	1.00	-5667
11020	11020						
		TOPSOIL					
		Excavation	70.38	132	132	1.00	
1722	1722						
		Fill	0.00	0	0	1.00	-5667
0	0						
		Mass ordinate for TOPSOIL = 1722					
595+00.00 EARTH							
		Excavation	583.33	1012	860	0.85	
7309	6213						
		Fill	0.70	7	7	1.00	-4814
11027	11027						
		TOPSOIL					
		Excavation	68.93	129	129	1.00	
1851	1851						
		Fill	0.00	0	0	1.00	-4814
0	0						
		Mass ordinate for TOPSOIL = 1851					
595+50.00 EARTH							
		Excavation	598.05	1094	930	0.85	
8403	7143						
		Fill	4.84	5	5	1.00	-3889
11032	11032						
		TOPSOIL					
		Excavation	69.98	128	128	1.00	
1979	1979						
		Fill	0.00	0	0	1.00	-3889
0	0						
		Mass ordinate for TOPSOIL = 1979					
596+00.00 EARTH							
		Excavation	710.10	1211	1030	0.85	
9614	8173						
		Fill	57.91	58	58	1.00	-2917
11090	11090						
		TOPSOIL					
		Excavation	88.48	147	147	1.00	
2126	2126						
		Fill	0.00	0	0	1.00	-2917
0	0						

Mass ordinate for TOPSOIL = 2126

596+50.00 EARTH						
	Excavation	666.23	1274	1083	0.85	
10888	9256					
	Fill	480.70	499	499	1.00	-2333
11589	11589					
TOPSOIL						
	Excavation	112.29	186	186	1.00	
2312	2312					
	Fill	0.00	0	0	1.00	-2333
0	0					

Mass ordinate for TOPSOIL = 2312

597+00.00 EARTH						
	Excavation	72.68	684	582	0.85	
11572	9838					
	Fill	1496.25	1831	1831	1.00	-3582
13420	13420					
TOPSOIL						
	Excavation	122.56	217	217	1.00	
2529	2529					
	Fill	0.00	0	0	1.00	-3582
0	0					

Mass ordinate for TOPSOIL = 2529

597+50.00 EARTH						
	Excavation	0.00	67	57	0.85	
11639	9895					
	Fill	2521.08	3720	3720	1.00	-7245
17140	17140					
TOPSOIL						
	Excavation	110.38	216	216	1.00	
2745	2745					
	Fill	0.00	0	0	1.00	-7245
0	0					

Mass ordinate for TOPSOIL = 2745

598+00.00 EARTH						
	Excavation	58.44	54	46	0.85	
11693	9941					
	Fill	1459.94	3686	3686	1.00	-10885
20826	20826					
TOPSOIL						
	Excavation	128.49	221	221	1.00	
2966	2966					
	Fill	0.00	0	0	1.00	-10885
0	0					

Mass ordinate for TOPSOIL = 2966

598+50.00 EARTH						
	Excavation	334.47	364	309	0.85	
12057	10250					
	Fill	481.64	1798	1798	1.00	-12374
22624	22624					
	TOPSOIL					
	Excavation	105.51	216	216	1.00	
3182	3182					
	Fill	0.00	0	0	1.00	-12374
0	0					
	Mass ordinate for TOPSOIL = 3182					

599+00.00 EARTH						
	Excavation	517.13	789	670	0.85	
12846	10920					
	Fill	181.63	614	614	1.00	-12318
23238	23238					
	TOPSOIL					
	Excavation	88.03	179	179	1.00	
3361	3361					
	Fill	0.00	0	0	1.00	-12318
0	0					
	Mass ordinate for TOPSOIL = 3361					

599+50.00 EARTH						
	Excavation	656.82	1087	924	0.85	
13933	11844					
	Fill	130.21	289	289	1.00	-11683
23527	23527					
	TOPSOIL					
	Excavation	87.00	163	163	1.00	
3524	3524					
	Fill	0.00	0	0	1.00	-11683
0	0					
	Mass ordinate for TOPSOIL = 3524					

600+00.00 EARTH						
	Excavation	669.93	1228	1044	0.85	
15161	12888					
	Fill	72.76	188	188	1.00	-10827
23715	23715					
	TOPSOIL					
	Excavation	82.90	158	158	1.00	
3682	3682					
	Fill	0.00	0	0	1.00	-10827
0	0					
	Mass ordinate for TOPSOIL = 3682					

600+50.00 EARTH						
	Excavation	575.71	1153	980	0.85	

16314	13868						
		Fill	19.91	86	86	1.00	-9933
23801	23801						
		TOPSOIL					
		Excavation	66.86	139	139	1.00	
3821	3821						
		Fill	0.00	0	0	1.00	-9933
0	0						
		Mass ordinate for TOPSOIL = 3821					
601+00.00 EARTH							
		Excavation	440.38	941	800	0.85	
17255	14668						
		Fill	9.14	27	27	1.00	-9160
23828	23828						
		TOPSOIL					
		Excavation	57.15	115	115	1.00	
3936	3936						
		Fill	0.00	0	0	1.00	-9160
0	0						
		Mass ordinate for TOPSOIL = 3936					
601+50.00 EARTH							
		Excavation	215.44	607	516	0.85	
17862	15184						
		Fill	29.68	36	36	1.00	-8680
23864	23864						
		TOPSOIL					
		Excavation	53.96	103	103	1.00	
4039	4039						
		Fill	0.00	0	0	1.00	-8680
0	0						
		Mass ordinate for TOPSOIL = 4039					
602+00.00 EARTH							
		Excavation	28.46	226	192	0.85	
18088	15376						
		Fill	104.07	124	124	1.00	-8612
23988	23988						
		TOPSOIL					
		Excavation	51.90	98	98	1.00	
4137	4137						
		Fill	0.00	0	0	1.00	-8612
0	0						
		Mass ordinate for TOPSOIL = 4137					
602+43.90 EARTH							
		Excavation	0.00	23	20	0.85	
18111	15396						
		Fill	481.78	476	476	1.00	-9068

24464	24464						
	TOPSOIL						
	Excavation	63.59	94	94	1.00		
4231	4231						
	Fill	0.00	0	0	1.00	-9068	
0	0						
	Mass ordinate for TOPSOIL = 4231						
602+50.00 EARTH							
	Excavation	0.00	0	0	0.85		
18111	15396						
	Fill	533.66	115	115	1.00	-9183	
24579	24579						
	TOPSOIL						
	Excavation	60.01	14	14	1.00		
4245	4245						
	Fill	0.00	0	0	1.00	-9183	
0	0						
	Mass ordinate for TOPSOIL = 4245						
603+00.00 EARTH							
	Excavation	0.00	0	0	0.85		
18111	15396						
	Fill	1478.01	1863	1863	1.00	-11046	
26442	26442						
	TOPSOIL						
	Excavation	89.69	139	139	1.00		
4384	4384						
	Fill	0.00	0	0	1.00	-11046	
0	0						
	Mass ordinate for TOPSOIL = 4384						
603+16.75 EARTH							
	Excavation	0.00	0	0	0.85		
18111	15396						
	Fill	1831.11	1026	1026	1.00	-12072	
27468	27468						
	TOPSOIL						
	Excavation	91.70	56	56	1.00		
4440	4440						
	Fill	0.00	0	0	1.00	-12072	
0	0						
	Mass ordinate for TOPSOIL = 4440						
603+50.00 EARTH							
	Excavation	0.00	0	0	0.85		
18111	15396						
	Fill	2320.19	2556	2556	1.00	-14628	
30024	30024						
	TOPSOIL						

		Excavation	96.65	116	116	1.00	
4556	4556						
		Fill	0.00	0	0	1.00	-14628
0	0						

Mass ordinate for TOPSOIL = 4556

604+00.00 EARTH

		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	2612.32	4568	4568	1.00	-19196
34592	34592						
		TOPSOIL					
		Excavation	106.19	188	188	1.00	
4744	4744						
		Fill	0.00	0	0	1.00	-19196
0	0						

Mass ordinate for TOPSOIL = 4744

604+50.00 EARTH

		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	1733.33	4023	4023	1.00	-23219
38615	38615						
		TOPSOIL					
		Excavation	85.54	177	177	1.00	
4921	4921						
		Fill	0.00	0	0	1.00	-23219
0	0						

Mass ordinate for TOPSOIL = 4921

604+98.90 EARTH

		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	1661.05	3074	3074	1.00	-26293
41689	41689						
		TOPSOIL					
		Excavation	86.31	156	156	1.00	
5077	5077						
		Fill	0.00	0	0	1.00	-26293
0	0						

Mass ordinate for TOPSOIL = 5077

605+00.00 EARTH

		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	1668.52	68	68	1.00	-26361
41757	41757						
		TOPSOIL					
		Excavation	86.26	4	4	1.00	
5081	5081						

		Fill	0.00	0	0	1.00	-26361
0	0						
		Mass ordinate for TOPSOIL = 5081					
605+50.00 EARTH							
		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	1393.12	2835	2835	1.00	-29196
44592	44592						
		TOPSOIL					
		Excavation	78.60	153	153	1.00	
5234	5234						
		Fill	0.00	0	0	1.00	-29196
0	0						
		Mass ordinate for TOPSOIL = 5234					

606+00.00 EARTH							
		Excavation	0.00	0	0	0.85	
18111	15396						
		Fill	575.98	1823	1823	1.00	-31019
46415	46415						
		TOPSOIL					
		Excavation	56.69	125	125	1.00	
5359	5359						
		Fill	0.00	0	0	1.00	-31019
0	0						
		Mass ordinate for TOPSOIL = 5359					

↑	G R A N D S U M M A R Y T O T A L S				
	Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	

	EARTH				
	Excavation	18111	15396	0.85	
	Fill	46415	46415	1.00	
	TOPSOIL				
	Excavation	5359	5359	1.00	
	Fill	0	0	1.00	

↑	S P L I T S U M M A R Y T O T A L S				
		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
Quant	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

	EARTH				
		Excavation	18111	15396	0
0	0.85				
		Fill	46415	46415	0
0	1.00				
	TOPSOIL				
		Excavation	5359	5359	0
0	1.00				
		Fill	0	0	0
0	1.00				

Input File: ewkprj.inp

Output File: Earthwork_Catoosa.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\CUSR028SideroadXSections.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_PR-earthwork08-09-16.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = CATOOSA_RIDGE
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 20+48.00 R 1
1    81    81          end sta = 24+04.38 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = CATOOSA_RIDGE

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

20+50.00 EARTH

0	0	Excavation	372.69	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
20+97.66 EARTH							
500	425	Excavation	194.13	500	425	0.85	
0	0	Fill	0.00	0	0	1.00	425
21+00.00 EARTH							
517	439	Excavation	196.13	17	14	0.85	
0	0	Fill	0.00	0	0	1.00	439
21+50.00 EARTH							
932	792	Excavation	252.36	415	353	0.85	
0	0	Fill	0.00	0	0	1.00	792
21+70.16 EARTH							
1113	945	Excavation	231.33	181	153	0.85	
0	0	Fill	0.00	0	0	1.00	945
22+00.00 EARTH							
1334	1132	Excavation	167.84	221	187	0.85	
1	1	Fill	1.86	1	1	1.00	1131
22+42.66 EARTH							
1554	1319	Excavation	110.15	220	187	0.85	
2	2	Fill	0.00	1	1	1.00	1317
22+50.00 EARTH							
1584	1344	Excavation	108.06	30	25	0.85	
2	2	Fill	0.00	0	0	1.00	1342
22+59.38 EARTH							
1622	1376	Excavation	108.16	38	32	0.85	

2	2	Fill	0.00	0	0	1.00	1374
---	---	------	------	---	---	------	------

23+00.00 EARTH

1741	1477	Excavation	50.38	119	101	0.85	
------	------	------------	-------	-----	-----	------	--

2	2	Fill	0.01	0	0	1.00	1475
---	---	------	------	---	---	------	------

23+50.00 EARTH

1827	1550	Excavation	42.32	86	73	0.85	
------	------	------------	-------	----	----	------	--

2	2	Fill	0.00	0	0	1.00	1548
---	---	------	------	---	---	------	------

24+00.00 EARTH

1901	1613	Excavation	38.07	74	63	0.85	
------	------	------------	-------	----	----	------	--

2	2	Fill	0.00	0	0	1.00	1611
---	---	------	------	---	---	------	------

24+04.38 EARTH

1907	1618	Excavation	38.02	6	5	0.85	
------	------	------------	-------	---	---	------	--

2	2	Fill	0.00	0	0	1.00	1616
---	---	------	------	---	---	------	------

↑		G R A N D	S U M M A R Y	T O T A L S		
		Material Name	Unadjusted	Adjusted	Mult	
			Volumes	Volumes	Factor	
			(cu. yd.)	(cu. yd.)		

EARTH

Excavation	1907	1618	0.85
Fill	2	2	1.00

↑		S P L I T	S U M M A R Y	T O T A L S	
---	--	-----------	---------------	-------------	--

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH

0	0.85	Excavation	1907	1618	0
		Fill	2	2	0

0 1.00

Input File: ewkprj.inp

Output File: Earthwork_OldElmore.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_OldElmoreEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = OLD_EL_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 23+00.00 R 1
1  81  81          end sta = 30+24.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = OLD_EL_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

23+14.94 EARTH

0	0	Excavation	23.72	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
23+50.00 EARTH							
42	36	Excavation	40.87	42	36	0.85	
0	0	Fill	0.00	0	0	1.00	36
23+98.93 EARTH							
110	94	Excavation	34.53	68	58	0.85	
13	13	Fill	13.87	13	13	1.00	81
24+00.00 EARTH							
111	95	Excavation	34.21	1	1	0.85	
14	14	Fill	14.22	1	1	1.00	81
24+50.00 EARTH							
184	157	Excavation	45.10	73	62	0.85	
40	40	Fill	13.41	26	26	1.00	117
25+00.00 EARTH							
291	248	Excavation	70.42	107	91	0.85	
53	53	Fill	0.17	13	13	1.00	195
25+24.93 EARTH							
376	320	Excavation	113.68	85	72	0.85	
53	53	Fill	0.00	0	0	1.00	267
25+50.00 EARTH							
496	422	Excavation	144.52	120	102	0.85	
53	53	Fill	0.00	0	0	1.00	369
26+00.00 EARTH							
790	672	Excavation	172.95	294	250	0.85	

53	53	Fill	0.00	0	0	1.00	619
26+50.00 EARTH							
982	835	Excavation	34.63	192	163	0.85	
61	61	Fill	8.61	8	8	1.00	774
27+00.00 EARTH							
1014	862	Excavation	0.00	32	27	0.85	
171	171	Fill	110.58	110	110	1.00	691
27+17.73 EARTH							
1014	862	Excavation	0.00	0	0	0.85	
253	253	Fill	139.61	82	82	1.00	609
27+50.00 EARTH							
1016	864	Excavation	3.67	2	2	0.85	
434	434	Fill	163.22	181	181	1.00	430
28+00.00 EARTH							
1024	871	Excavation	5.41	8	7	0.85	
745	745	Fill	172.16	311	311	1.00	126
28+43.73 EARTH							
1037	882	Excavation	10.80	13	11	0.85	
1011	1011	Fill	156.63	266	266	1.00	-129
28+50.00 EARTH							
1040	884	Excavation	11.03	3	2	0.85	
1047	1047	Fill	154.60	36	36	1.00	-163
29+00.00 EARTH							
1079	917	Excavation	30.72	39	33	0.85	
1253	1253	Fill	67.87	206	206	1.00	-336

29+27.73 EARTH						
	Excavation	34.24	33	28	0.85	
1112	945					
	Fill	46.52	59	59	1.00	-367
1312	1312					

29+50.00 EARTH						
	Excavation	12.74	19	16	0.85	
1131	961					
	Fill	86.15	55	55	1.00	-406
1367	1367					

30+00.00 EARTH						
	Excavation	0.00	12	10	0.85	
1143	971					
	Fill	222.66	286	286	1.00	-682
1653	1653					

30+24.00 EARTH						
	Excavation	9.65	4	4	0.85	
1147	975					
	Fill	482.55	313	313	1.00	-991
1966	1966					

↑	G R A N D	S U M M A R Y	T O T A L S	
	Material Name	Unadjusted	Adjusted	Mult
		Volumes	Volumes	Factor
		(cu. yd.)	(cu. yd.)	

EARTH				
	Excavation	1147	975	0.85
	Fill	1966	1966	1.00
↑	S P L I T	S U M M A R Y	T O T A L S	

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH				
	Excavation	1147	975	0
0 0.85	Fill	1966	1966	0
0 1.00				

↑	B A L A N C E	P O I N T	S U M M A R Y	
---	---------------	-----------	---------------	--

Mult Factor	Material Name	Cumulative		Incremental		
		Unadjusted	Adjusted	Unadjusted	Adjusted	
		Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	Volumes (cu. yd.)	
		-----	-----	-----	-----	

	Station = 28+21.61					
	EARTH					
	Excavation	1031	876	1031	876	
0.85						
	Fill	876	876	876	876	
1.00						
	TOPSOIL					
	Excavation	0	0	0	0	
1.00						
	Fill	0	0	0	0	
1.00						

Input File: ewkprj.inp

Output File: Earthwork_BearCreekS.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_OldElmoreEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = BEAR_S_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 35+00.00 R 1
1    81    81          end sta = 40+24.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = BEAR_S_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

35+66.70 EARTH

0	0	Excavation	31.27	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
36+00.00 EARTH							
46	39	Excavation	43.94	46	39	0.85	
0	0	Fill	0.00	0	0	1.00	39
36+39.43 EARTH							
110	93	Excavation	43.82	64	54	0.85	
0	0	Fill	0.54	0	0	1.00	93
36+50.00 EARTH							
127	107	Excavation	40.68	17	14	0.85	
0	0	Fill	0.70	0	0	1.00	107
37+00.00 EARTH							
188	158	Excavation	24.66	61	51	0.85	
22	22	Fill	23.13	22	22	1.00	136
37+26.70 EARTH							
210	177	Excavation	19.51	22	19	0.85	
62	62	Fill	57.49	40	40	1.00	115
37+50.00 EARTH							
221	187	Excavation	6.86	11	10	0.85	
133	133	Fill	106.66	71	71	1.00	54
37+71.26 EARTH							
225	190	Excavation	2.13	4	3	0.85	
239	239	Fill	162.37	106	106	1.00	-49
38+00.00 EARTH							
228	193	Excavation	3.76	3	3	0.85	

464	464	Fill	259.87	225	225	1.00	-271
38+50.00 EARTH							
241	204	Excavation	10.35	13	11	0.85	
1084	1084	Fill	409.74	620	620	1.00	-880
38+58.53 EARTH							
245	207	Excavation	12.54	4	3	0.85	
1216	1216	Fill	425.55	132	132	1.00	-1009
39+00.00 EARTH							
298	252	Excavation	56.51	53	45	0.85	
1835	1835	Fill	380.09	619	619	1.00	-1583
39+31.26 EARTH							
350	296	Excavation	33.50	52	44	0.85	
2313	2313	Fill	445.36	478	478	1.00	-2017
39+50.00 EARTH							
362	306	Excavation	0.10	12	10	0.85	
2681	2681	Fill	614.87	368	368	1.00	-2375
40+00.00 EARTH							
362	306	Excavation	0.00	0	0	0.85	
3995	3995	Fill	803.91	1314	1314	1.00	-3689
40+24.00 EARTH							
362	306	Excavation	0.00	0	0	0.85	
4854	4854	Fill	1128.81	859	859	1.00	-4548

↑	GRAND	SUMMARY	TOTALS
Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
EARTH			

		Excavation	362	306	0.85	
		Fill	4854	4854	1.00	
↑		S P L I T	S U M M A R Y	T O T A L S		
Quant			XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name		Unadjusted	Adjusted	Unadjusted	Adjusted
Mult			Volume	Volume	Volume	Volume
Factor			(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

	EARTH					
		Excavation	362	306		0
0	0.85					
		Fill	4854	4854		0
0	1.00					
↑		B A L A N C E	P O I N T	S U M M A R Y		
	Material Name		Cumulative		Incremental	
Mult			Unadjusted	Adjusted	Unadjusted	Adjusted
Factor			Volumes	Volumes	Volumes	Volumes
			(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

	Station = 37+61.15					
	EARTH					
		Excavation	222	189	222	189
0.85						
		Fill	189	189	189	189
1.00						
	TOPSOIL					
		Excavation	0	0	0	0
1.00						
		Fill	0	0	0	0
1.00						

Input File: ewkprj.inp

Output File: Earthwork_Hinds.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = HINDS_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 44+62.00 R 1
1  81  81          end sta = 50+24.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = HINDS_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

44+62.00 EARTH

0	0	Excavation	42.75	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
45+00.00 EARTH							
66	57	Excavation	51.71	66	57	0.85	
0	0	Fill	0.00	0	0	1.00	57
45+50.00 EARTH							
120	103	Excavation	6.53	54	46	0.85	
29	29	Fill	31.64	29	29	1.00	74
46+00.00 EARTH							
128	110	Excavation	1.86	8	7	0.85	
175	175	Fill	126.56	146	146	1.00	-65
46+48.33 EARTH							
130	111	Excavation	0.00	2	1	0.85	
423	423	Fill	151.06	248	248	1.00	-312
46+50.00 EARTH							
130	111	Excavation	0.00	0	0	0.85	
432	432	Fill	150.76	9	9	1.00	-321
47+00.00 EARTH							
130	111	Excavation	0.00	0	0	0.85	
714	714	Fill	153.94	282	282	1.00	-603
47+13.27 EARTH							
130	111	Excavation	0.00	0	0	0.85	
790	790	Fill	155.96	76	76	1.00	-679
47+50.00 EARTH							
130	111	Excavation	0.00	0	0	0.85	

		Fill	183.01	231	231	1.00	-910
1021	1021						
	47+73.33	EARTH					
		Excavation	0.00	0	0	0.85	
130	111						
		Fill	232.27	179	179	1.00	-1089
1200	1200						
	47+88.19	EARTH					
		Excavation	0.00	0	0	0.85	
130	111						
		Fill	257.05	135	135	1.00	-1224
1335	1335						
	48+00.00	EARTH					
		Excavation	0.00	0	0	0.85	
130	111						
		Fill	267.22	115	115	1.00	-1339
1450	1450						
	48+48.26	EARTH					
		Excavation	8.60	8	7	0.85	
138	118						
		Fill	296.04	503	503	1.00	-1835
1953	1953						
	48+50.00	EARTH					
		Excavation	9.83	1	1	0.85	
139	119						
		Fill	296.76	19	19	1.00	-1853
1972	1972						
	49+00.00	EARTH					
		Excavation	127.33	127	108	0.85	
266	227						
		Fill	133.28	398	398	1.00	-2143
2370	2370						
	49+13.19	EARTH					
		Excavation	153.08	69	58	0.85	
335	285						
		Fill	111.37	60	60	1.00	-2145
2430	2430						
	49+50.00	EARTH					
		Excavation	0.00	104	89	0.85	
439	374						
		Fill	446.55	380	380	1.00	-2436
2810	2810						

50+00.00 EARTH						
	Excavation	0.00	0	0	0.85	
439	374					
	Fill	944.13	1288	1288	1.00	-3724
4098	4098					

50+24.00 EARTH						
	Excavation	0.00	0	0	0.85	
439	374					
	Fill	1825.11	1231	1231	1.00	-4955
5329	5329					

↑	G R A N D	S U M M A R Y	T O T A L S
	Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)
			Mult Factor

EARTH				
	Excavation	439	374	0.85
	Fill	5329	5329	1.00
↑	S P L I T	S U M M A R Y	T O T A L S	

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH				
0	Excavation	439	374	0
0.85				
	Fill	5329	5329	0
0				
1.00				

↑	B A L A N C E	P O I N T	S U M M A R Y
	Material Name	Cumulative	Incremental
Mult		Unadjusted	Adjusted
Factor		Unadjusted	Adjusted
		Volumes (cu. yd.)	Volumes (cu. yd.)
		Volumes (cu. yd.)	Volumes (cu. yd.)

Station = 45+76.62					
EARTH					
	Excavation	126	107	126	107
0.85					

1.00		Fill	107	107	107	107
	TOPSOIL					
1.00		Excavation	0	0	0	0
1.00		Fill	0	0	0	0

Input File: ewkprj.inp

Output File: Earthwork_Buck.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = BUCK_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 60+48.00 R 1
1  81  81          end sta = 66+50.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = BUCK_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

60+48.00 EARTH

0	0	Excavation	697.81	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
60+50.00 EARTH							
47	40	Excavation	576.83	47	40	0.85	
0	0	Fill	0.00	0	0	1.00	40
61+00.00 EARTH							
939	799	Excavation	387.07	892	759	0.85	
0	0	Fill	0.00	0	0	1.00	799
61+09.30 EARTH							
1077	916	Excavation	411.21	138	117	0.85	
0	0	Fill	0.00	0	0	1.00	916
61+50.00 EARTH							
1696	1442	Excavation	410.49	619	526	0.85	
0	0	Fill	0.00	0	0	1.00	1442
61+74.17 EARTH							
2038	1733	Excavation	354.35	342	291	0.85	
0	0	Fill	0.00	0	0	1.00	1733
62+00.00 EARTH							
2343	1992	Excavation	282.74	305	259	0.85	
0	0	Fill	0.00	0	0	1.00	1992
62+29.30 EARTH							
2599	2209	Excavation	188.29	256	217	0.85	
0	0	Fill	0.00	0	0	1.00	2209
62+50.00 EARTH							
2723	2315	Excavation	135.88	124	106	0.85	

0	0	Fill	0.00	0	0	1.00	2315
62+88.32 EARTH							
2864	2435	Excavation	62.92	141	120	0.85	
5	5	Fill	7.66	5	5	1.00	2430
63+00.00 EARTH							
2888	2456	Excavation	49.97	24	21	0.85	
9	9	Fill	12.17	4	4	1.00	2447
63+43.45 EARTH							
2947	2506	Excavation	23.44	59	50	0.85	
36	36	Fill	21.65	27	27	1.00	2470
63+50.00 EARTH							
2953	2511	Excavation	22.61	6	5	0.85	
41	41	Fill	21.06	5	5	1.00	2470
63+87.99 EARTH							
2982	2536	Excavation	18.77	29	25	0.85	
66	66	Fill	15.17	25	25	1.00	2470
64+00.00 EARTH							
2990	2543	Excavation	15.97	8	7	0.85	
72	72	Fill	13.18	6	6	1.00	2471
64+08.32 EARTH							
2995	2547	Excavation	15.01	5	4	0.85	
76	76	Fill	12.22	4	4	1.00	2471
64+50.00 EARTH							
3017	2566	Excavation	13.91	22	19	0.85	
96	96	Fill	13.64	20	20	1.00	2470

64+52.86 EARTH						
	Excavation	13.99	1	1	0.85	
3018	2567					
	Fill	14.45	1	1	1.00	2470
97	97					

65+00.00 EARTH						
	Excavation	35.27	43	37	0.85	
3061	2604					
	Fill	0.80	13	13	1.00	2494
110	110					

65+07.99 EARTH						
	Excavation	38.49	11	9	0.85	
3072	2613					
	Fill	0.01	0	0	1.00	2503
110	110					

65+50.00 EARTH						
	Excavation	45.65	65	56	0.85	
3137	2669					
	Fill	0.00	0	0	1.00	2559
110	110					

65+63.13 EARTH						
	Excavation	49.86	23	20	0.85	
3160	2689					
	Fill	0.00	0	0	1.00	2579
110	110					

66+00.00 EARTH						
	Excavation	42.44	63	54	0.85	
3223	2743					
	Fill	0.00	0	0	1.00	2633
110	110					

66+27.99 EARTH						
	Excavation	30.69	38	32	0.85	
3261	2775					
	Fill	0.00	0	0	1.00	2665
110	110					

↑	G R A N D		S U M M A R Y		T O T A L S	
	Material Name		Unadjusted	Adjusted	Mult	
			Volumes	Volumes	Factor	
			(cu. yd.)	(cu. yd.)		

	EARTH					
	Excavation		3261	2775	0.85	
	Fill		110	110	1.00	

		S P L I T	S U M M A R Y	T O T A L S	
Quant	Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Adjusted Volume (cu. yd.)
Mult					
Factor					

-----		-----	-----	-----	-----

	EARTH				
	Excavation	3261	2775		0
0 0.85					
	Fill	110	110		0
0 1.00					

Input File: ewkprj.inp

Output File: Earthwork_Shelby.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = SHELBY_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 65+00.00 R 1
1  81  81          end sta = 70+24.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = SHELBY_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol	(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

65+40.00 EARTH

0	0	Excavation	21.14	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
65+46.08 EARTH							
5	5	Excavation	26.48	5	5	0.85	
0	0	Fill	0.00	0	0	1.00	5
65+50.00 EARTH							
9	9	Excavation	31.21	4	4	0.85	
0	0	Fill	0.00	0	0	1.00	9
66+00.00 EARTH							
195	167	Excavation	169.73	186	158	0.85	
0	0	Fill	0.00	0	0	1.00	167
66+12.75 EARTH							
285	243	Excavation	209.83	90	76	0.85	
0	0	Fill	0.00	0	0	1.00	243
66+50.00 EARTH							
635	540	Excavation	297.04	350	297	0.85	
0	0	Fill	0.00	0	0	1.00	540
66+61.08 EARTH							
762	648	Excavation	322.85	127	108	0.85	
0	0	Fill	0.00	0	0	1.00	648
67+00.00 EARTH							
1283	1091	Excavation	400.20	521	443	0.85	
0	0	Fill	0.00	0	0	1.00	1091
67+31.50 EARTH							
1803	1533	Excavation	491.73	520	442	0.85	

0	0	Fill	0.00	0	0	1.00	1533
67+50.00 EARTH							
2151	1829	Excavation	525.49	348	296	0.85	
0	0	Fill	0.00	0	0	1.00	1829
67+79.83 EARTH							
2758	2345	Excavation	572.39	607	516	0.85	
0	0	Fill	0.00	0	0	1.00	2345
68+00.00 EARTH							
3196	2717	Excavation	600.45	438	372	0.85	
0	0	Fill	0.00	0	0	1.00	2717
68+46.50 EARTH							
4177	3551	Excavation	538.81	981	834	0.85	
0	0	Fill	0.00	0	0	1.00	3551
68+50.00 EARTH							
4256	3618	Excavation	686.21	79	67	0.85	
0	0	Fill	0.00	0	0	1.00	3618
69+00.00 EARTH							
5409	4598	Excavation	559.51	1153	980	0.85	
0	0	Fill	0.00	0	0	1.00	4598
69+50.00 EARTH							
6399	5439	Excavation	509.38	990	841	0.85	
0	0	Fill	0.00	0	0	1.00	5439
70+00.00 EARTH							
7335	6234	Excavation	501.26	936	795	0.85	
0	0	Fill	0.00	0	0	1.00	6234

70+24.00	EARTH					
	Excavation	874.28	611	520	0.85	
7946	6754					
	Fill	0.00	0	0	1.00	6754
0	0					

↑		G R A N D	S U M M A R Y	T O T A L S	
		Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor

EARTH

	Excavation	7946	6754	0.85
	Fill	0	0	1.00
↑	S P L I T	S U M M A R Y	T O T A L S	

		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
Quant	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH

	Excavation	7946	6754	0
0 0.85	Fill	0	0	0
0 1.00				

Input File: ewkprj.inp

Output File: Earthwork_JKBowman.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = JK_BOW_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 80+48.00 R 1
1    81    81          end sta = 85+00.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = JK_BOW_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station			Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

80+48.00 EARTH

0	0	Excavation	726.72	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
80+50.00 EARTH							
48	41	Excavation	579.99	48	41	0.85	
0	0	Fill	0.00	0	0	1.00	41
81+00.00 EARTH							
890	757	Excavation	329.84	842	716	0.85	
0	0	Fill	0.00	0	0	1.00	757
81+01.96 EARTH							
914	777	Excavation	327.76	24	20	0.85	
0	0	Fill	0.00	0	0	1.00	777
81+50.00 EARTH							
1421	1208	Excavation	241.63	507	431	0.85	
0	0	Fill	0.00	0	0	1.00	1208
81+68.63 EARTH							
1564	1330	Excavation	172.90	143	122	0.85	
0	0	Fill	0.00	0	0	1.00	1330
82+00.00 EARTH							
1710	1454	Excavation	78.85	146	124	0.85	
3	3	Fill	4.63	3	3	1.00	1451
82+01.96 EARTH							
1716	1459	Excavation	76.29	6	5	0.85	
3	3	Fill	5.48	0	0	1.00	1456
82+50.00 EARTH							
1790	1522	Excavation	7.18	74	63	0.85	

61	61	Fill	59.80	58	58	1.00	1461
	83+00.00	EARTH					
		Excavation	8.73	15	13	0.85	
1805	1535						
		Fill	121.31	168	168	1.00	1306
229	229						
	83+50.00	EARTH					
		Excavation	26.53	33	28	0.85	
1838	1563						
		Fill	59.40	167	167	1.00	1167
396	396						
	83+78.13	EARTH					
		Excavation	17.44	23	19	0.85	
1861	1582						
		Fill	23.71	43	43	1.00	1143
439	439						
	84+00.00	EARTH					
		Excavation	22.20	16	14	0.85	
1877	1596						
		Fill	8.89	13	13	1.00	1144
452	452						
	84+11.46	EARTH					
		Excavation	22.09	9	8	0.85	
1886	1604						
		Fill	5.16	3	3	1.00	1149
455	455						
	84+50.00	EARTH					
		Excavation	23.84	33	28	0.85	
1919	1632						
		Fill	0.00	4	4	1.00	1173
459	459						
	84+78.13	EARTH					
		Excavation	38.88	33	28	0.85	
1952	1660						
		Fill	0.00	0	0	1.00	1201
459	459						
↑		G R A N D	S U M M A R Y	T O T A L S			
		Material Name	Unadjusted	Adjusted	Mult		
			Volumes	Volumes	Factor		
			(cu. yd.)	(cu. yd.)			

	EARTH						

		Excavation	1952	1660	0.85	
		Fill	459	459	1.00	
↑		S P L I T	S U M M A R Y	T O T A L S		
Quant			XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name		Unadjusted	Adjusted	Unadjusted	Adjusted
Mult			Volume	Volume	Volume	Volume
Factor			(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

	EARTH					
		Excavation	1952	1660		0
0	0.85					
		Fill	459	459		0
0	1.00					

Input File: ewkprj.inp

Output File: Earthwork_WinAndAsh.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = WINDSW_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 85+00.00 R 1
1  81  81          end sta = 94+00.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = WINDSW_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

86+00.00 EARTH

0	0	Excavation	33.10	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
86+14.17 EARTH							
19	16	Excavation	40.62	19	16	0.85	
0	0	Fill	0.00	0	0	1.00	16
86+50.00 EARTH							
81	69	Excavation	52.59	62	53	0.85	
0	0	Fill	0.00	0	0	1.00	69
86+79.10 EARTH							
126	107	Excavation	30.47	45	38	0.85	
4	4	Fill	8.29	4	4	1.00	103
87+00.00 EARTH							
144	123	Excavation	17.31	18	16	0.85	
16	16	Fill	23.30	12	12	1.00	107
87+39.17 EARTH							
173	148	Excavation	23.02	29	25	0.85	
52	52	Fill	27.01	36	36	1.00	96
87+46.86 EARTH							
180	154	Excavation	26.12	7	6	0.85	
59	59	Fill	25.04	7	7	1.00	95
87+50.00 EARTH							
183	157	Excavation	27.57	3	3	0.85	
62	62	Fill	23.63	3	3	1.00	95
88+00.00 EARTH							
284	243	Excavation	81.91	101	86	0.85	

85	85	Fill	1.58	23	23	1.00	158
88+06.93 EARTH							
307	262	Excavation	95.83	23	19	0.85	
85	85	Fill	0.00	0	0	1.00	177
88+50.00 EARTH							
553	472	Excavation	213.21	246	210	0.85	
85	85	Fill	0.00	0	0	1.00	387
88+71.86 EARTH							
755	644	Excavation	286.30	202	172	0.85	
85	85	Fill	0.00	0	0	1.00	559
89+00.00 EARTH							
1120	954	Excavation	413.76	365	310	0.85	
85	85	Fill	0.00	0	0	1.00	869
89+50.00 EARTH							
1917	1631	Excavation	446.53	797	677	0.85	
85	85	Fill	0.00	0	0	1.00	1546
90+00.00 EARTH							
2747	2336	Excavation	449.72	830	705	0.85	
85	85	Fill	0.00	0	0	1.00	2251
90+24.00 EARTH							
3410	2900	Excavation	1041.90	663	564	0.85	
85	85	Fill	0.00	0	0	1.00	2815
90+48.00 EARTH							
4398	3740	Excavation	1181.68	988	840	0.85	
85	85	Fill	0.00	0	0	1.00	3655

90+50.00 EARTH						
	Excavation	982.73	80	68	0.85	
4478	3808					
	Fill	0.00	0	0	1.00	3723
85	85					
91+00.00 EARTH						
	Excavation	497.55	1371	1165	0.85	
5849	4973					
	Fill	0.00	0	0	1.00	4888
85	85					
91+50.00 EARTH						
	Excavation	519.99	942	801	0.85	
6791	5774					
	Fill	0.00	0	0	1.00	5689
85	85					
92+00.00 EARTH						
	Excavation	479.82	926	787	0.85	
7717	6561					
	Fill	0.00	0	0	1.00	6476
85	85					
92+50.00 EARTH						
	Excavation	429.80	842	716	0.85	
8559	7277					
	Fill	0.00	0	0	1.00	7192
85	85					
93+00.00 EARTH						
	Excavation	273.68	651	554	0.85	
9210	7831					
	Fill	0.00	0	0	1.00	7746
85	85					
93+50.00 EARTH						
	Excavation	124.92	369	314	0.85	
9579	8145					
	Fill	0.00	0	0	1.00	8060
85	85					
93+75.00 EARTH						
	Excavation	107.75	108	92	0.85	
9687	8237					
	Fill	0.00	0	0	1.00	8152
85	85					

93+94.09 EARTH

9829	8358	Excavation	294.00	142	121	0.85	
		Fill	0.00	0	0	1.00	8273

85	85	G R A N D S U M M A R Y T O T A L S					
↑		Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor		

EARTH

Excavation	9829	8358	0.85
Fill	85	85	1.00

↑	S P L I T	S U M M A R Y	T O T A L S
---	-----------	---------------	-------------

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH

		Excavation	9829	8358	0
0	0.85	Fill	85	85	0
0	1.00				

Input File: ewkprj.inp

Output File: Earthwork_Atkins.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = ATKINS_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 100+48.00 R 1
1    81    81          end sta = 104+50.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = ATKINS_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

100+48.00 EARTH

0	0	Excavation	0.00	0	0	0.85	
0	0	Fill	721.05	0	0	1.00	0
100+50.00 EARTH							
0	0	Excavation	0.00	0	0	0.85	
49	49	Fill	609.96	49	49	1.00	-49
100+92.94 EARTH							
0	0	Excavation	0.00	0	0	0.85	
836	836	Fill	380.09	787	787	1.00	-836
101+00.00 EARTH							
0	0	Excavation	0.00	0	0	0.85	
939	939	Fill	405.00	103	103	1.00	-939
101+50.00 EARTH							
4	3	Excavation	4.42	4	3	0.85	
1670	1670	Fill	384.78	731	731	1.00	-1667
101+57.80 EARTH							
5	4	Excavation	4.58	1	1	0.85	
1778	1778	Fill	363.47	108	108	1.00	-1774
102+00.00 EARTH							
9	8	Excavation	1.16	4	4	0.85	
2226	2226	Fill	210.07	448	448	1.00	-2218
102+12.94 EARTH							
9	8	Excavation	0.46	0	0	0.85	
2313	2313	Fill	154.52	87	87	1.00	-2305
102+43.81 EARTH							
14	12	Excavation	8.23	5	4	0.85	

2448	2448	Fill	81.51	135	135	1.00	-2436
102+50.00 EARTH							
16	14	Excavation	10.15	2	2	0.85	
2465	2465	Fill	69.37	17	17	1.00	-2451
102+98.95 EARTH							
41	35	Excavation	17.28	25	21	0.85	
2536	2536	Fill	9.48	71	71	1.00	-2501
103+00.00 EARTH							
42	36	Excavation	17.40	1	1	0.85	
2536	2536	Fill	8.71	0	0	1.00	-2500
103+50.00 EARTH							
79	68	Excavation	22.70	37	32	0.85	
2544	2544	Fill	0.40	8	8	1.00	-2476
103+63.81 EARTH							
91	78	Excavation	23.80	12	10	0.85	
2544	2544	Fill	0.00	0	0	1.00	-2466
103+85.00 EARTH							
110	94	Excavation	24.09	19	16	0.85	
2544	2544	Fill	0.00	0	0	1.00	-2450

↑	G R A N D		S U M M A R Y	T O T A L S			
	Material Name		Unadjusted	Adjusted	Mult		
			Volumes	Volumes	Factor		
			(cu. yd.)	(cu. yd.)			

	EARTH						
		Excavation	110	94	0.85		
		Fill	2544	2544	1.00		
↑	S P L I T		S U M M A R Y	T O T A L S			
		XS Quant	XS Quant	Add/Sub	Quant	Add/Sub	
Quant							

Mult		Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Factor			Volume	Volume	Volume	Volume
			(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

-----		EARTH				
0	0.85	Excavation	110	94		0
0	1.00	Fill	2544	2544		0

Input File: ewkprj.inp

Output File: Earthwork_Frontage.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_AtkinsEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = FRONTAGE_RD
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 10+00.00 R 1
1    81    81          end sta = 21+00.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = FRONTAGE_RD

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

10+50.00 EARTH

0	0	Excavation	0.00	0	0	0.85	
0	0	Fill	206.66	0	0	1.00	0
10+75.00 EARTH							
0	0	Excavation	0.00	0	0	0.85	
197	197	Fill	219.22	197	197	1.00	-197
11+00.00 EARTH							
1	1	Excavation	1.45	1	1	0.85	
369	369	Fill	151.87	172	172	1.00	-368
11+25.00 EARTH							
7	6	Excavation	10.43	6	5	0.85	
481	481	Fill	90.21	112	112	1.00	-475
11+50.00 EARTH							
24	21	Excavation	26.92	17	15	0.85	
543	543	Fill	44.43	62	62	1.00	-522
11+75.00 EARTH							
64	55	Excavation	59.65	40	34	0.85	
568	568	Fill	9.48	25	25	1.00	-513
12+00.00 EARTH							
133	114	Excavation	89.18	69	59	0.85	
574	574	Fill	2.62	6	6	1.00	-460
12+50.00 EARTH							
216	185	Excavation	0.99	83	71	0.85	
631	631	Fill	59.38	57	57	1.00	-446
13+00.00 EARTH							
222	190	Excavation	5.11	6	5	0.85	

		Fill	58.59	109	109	1.00	-550
740	740						
13+50.00 EARTH							
		Excavation	27.22	30	25	0.85	
252	215						
		Fill	3.45	57	57	1.00	-582
797	797						
14+00.00 EARTH							
		Excavation	75.00	95	80	0.85	
347	295						
		Fill	0.00	3	3	1.00	-505
800	800						
14+50.00 EARTH							
		Excavation	113.62	175	148	0.85	
522	443						
		Fill	0.00	0	0	1.00	-357
800	800						
15+00.00 EARTH							
		Excavation	97.75	196	166	0.85	
718	609						
		Fill	0.00	0	0	1.00	-191
800	800						
15+50.00 EARTH							
		Excavation	66.95	153	130	0.85	
871	739						
		Fill	0.00	0	0	1.00	-61
800	800						
16+00.00 EARTH							
		Excavation	0.33	62	53	0.85	
933	792						
		Fill	50.54	47	47	1.00	-55
847	847						
16+50.00 EARTH							
		Excavation	0.00	0	0	0.85	
933	792						
		Fill	318.54	342	342	1.00	-397
1189	1189						
17+00.00 EARTH							
		Excavation	0.00	0	0	0.85	
933	792						
		Fill	435.13	698	698	1.00	-1095
1887	1887						

17+50.00 EARTH						
	Excavation	0.00	0	0	0.85	
933	792					
	Fill	235.79	621	621	1.00	-1716
2508	2508					

18+00.00 EARTH						
	Excavation	0.00	0	0	0.85	
933	792					
	Fill	57.55	272	272	1.00	-1988
2780	2780					

18+50.00 EARTH						
	Excavation	47.21	44	37	0.85	
977	829					
	Fill	0.00	53	53	1.00	-2004
2833	2833					

19+00.00 EARTH						
	Excavation	123.72	158	135	0.85	
1135	964					
	Fill	0.00	0	0	1.00	-1869
2833	2833					

19+50.00 EARTH						
	Excavation	41.07	153	130	0.85	
1288	1094					
	Fill	0.00	0	0	1.00	-1739
2833	2833					

20+00.00 EARTH						
	Excavation	0.00	38	32	0.85	
1326	1126					
	Fill	352.04	326	326	1.00	-2033
3159	3159					

20+50.00 EARTH						
	Excavation	0.00	0	0	0.85	
1326	1126					
	Fill	324.23	626	626	1.00	-2659
3785	3785					

G R A N D		S U M M A R Y		T O T A L S	
Material Name		Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	

EARTH					
	Excavation	1326	1126	0.85	
	Fill	3785	3785	1.00	

		S P L I T	S U M M A R Y	T O T A L S	
Quant	Material Name	XS Quant Unadjusted Volume (cu. yd.)	XS Quant Adjusted Volume (cu. yd.)	Add/Sub Quant Unadjusted Volume (cu. yd.)	Add/Sub Adjusted Volume (cu. yd.)
Mult					
Factor					

-----		-----	-----	-----	-----

	EARTH				
	Excavation	1326	1126		0
0	0.85				
	Fill	3785	3785		0
0	1.00				

Input File: ewkprj.inp

Output File: Earthwork_BearCreekN.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_CatoosaEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = BEAR_N_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 103+00.00 R 1
1    81    81          end sta = 110+24.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = BEAR_N_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station			Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol		(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)	(sq. ft.)	(cu. yd.)	(cu. yd.)			yd.)

103+37.92 EARTH

0	0	Excavation	30.55	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
103+50.00 EARTH							
14	12	Excavation	31.62	14	12	0.85	
0	0	Fill	0.00	0	0	1.00	12
104+00.00 EARTH							
97	83	Excavation	58.03	83	71	0.85	
0	0	Fill	0.00	0	0	1.00	83
104+11.25 EARTH							
123	105	Excavation	67.51	26	22	0.85	
0	0	Fill	0.00	0	0	1.00	105
104+50.00 EARTH							
246	210	Excavation	104.03	123	105	0.85	
0	0	Fill	0.00	0	0	1.00	210
105+00.00 EARTH							
474	404	Excavation	142.00	228	194	0.85	
0	0	Fill	0.00	0	0	1.00	404
105+02.92 EARTH							
489	417	Excavation	143.95	15	13	0.85	
0	0	Fill	0.00	0	0	1.00	417
105+10.91 EARTH							
533	454	Excavation	151.23	44	37	0.85	
0	0	Fill	0.00	0	0	1.00	454
105+50.00 EARTH							
781	665	Excavation	191.67	248	211	0.85	

0	0	Fill	0.00	0	0	1.00	665
106+00.00 EARTH							
1160	987	Excavation	217.38	379	322	0.85	
0	0	Fill	0.00	0	0	1.00	987
106+02.58 EARTH							
1181	1005	Excavation	217.45	21	18	0.85	
0	0	Fill	0.00	0	0	1.00	1005
106+50.00 EARTH							
1580	1344	Excavation	237.37	399	339	0.85	
0	0	Fill	0.00	0	0	1.00	1344
106+75.91 EARTH							
1796	1527	Excavation	212.46	216	183	0.85	
0	0	Fill	0.00	0	0	1.00	1527
107+00.00 EARTH							
1989	1691	Excavation	219.45	193	164	0.85	
0	0	Fill	0.00	0	0	1.00	1691
107+50.00 EARTH							
2381	2024	Excavation	204.05	392	333	0.85	
0	0	Fill	0.00	0	0	1.00	2024
108+00.00 EARTH							
2740	2329	Excavation	183.93	359	305	0.85	
0	0	Fill	0.00	0	0	1.00	2329
108+50.00 EARTH							
3079	2617	Excavation	182.18	339	288	0.85	
0	0	Fill	0.00	0	0	1.00	2617

109+00.00 EARTH						
	Excavation	253.63	404	343	0.85	
3483	2960					
	Fill	0.00	0	0	1.00	2960
0	0					

109+50.00 EARTH						
	Excavation	279.32	493	419	0.85	
3976	3379					
	Fill	0.00	0	0	1.00	3379
0	0					

110+00.00 EARTH						
	Excavation	519.63	740	629	0.85	
4716	4008					
	Fill	0.00	0	0	1.00	4008
0	0					

110+24.00 EARTH						
	Excavation	1146.92	741	630	0.85	
5457	4638					
	Fill	0.00	0	0	1.00	4638
0	0					

↑	G R A N D		S U M M A R Y		T O T A L S	
	Material Name		Unadjusted	Adjusted	Mult	
			Volumes	Volumes	Factor	
			(cu. yd.)	(cu. yd.)		

EARTH

Excavation	5457	4638	0.85
Fill	0	0	1.00

↑	S P L I T		S U M M A R Y		T O T A L S	
---	-----------	--	---------------	--	-------------	--

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH

	Excavation	5457	4638	0
0 0.85	Fill	0	0	0
0 1.00				

Input File: ewkprj.inp

Output File: Earthwork_Beaty.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_AtkinsEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = BEATTY_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 120+48.00 R 1
1    81    81          end sta = 126+50.00 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = BEATTY_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

120+48.00 EARTH

0	0	Excavation	3.69	0	0	0.85	
0	0	Fill	65.83	0	0	1.00	0
120+50.00 EARTH							
2	2	Excavation	48.18	2	2	0.85	
7	7	Fill	118.45	7	7	1.00	-5
121+00.00 EARTH							
47	40	Excavation	0.00	45	38	0.85	
332	332	Fill	232.10	325	325	1.00	-292
121+50.00 EARTH							
47	40	Excavation	0.00	0	0	0.85	
927	927	Fill	410.87	595	595	1.00	-887
122+00.00 EARTH							
57	48	Excavation	10.42	10	8	0.85	
1809	1809	Fill	541.54	882	882	1.00	-1761
122+50.00 EARTH							
202	172	Excavation	146.62	145	124	0.85	
2595	2595	Fill	307.34	786	786	1.00	-2423
123+00.00 EARTH							
473	402	Excavation	146.23	271	230	0.85	
2978	2978	Fill	106.16	383	383	1.00	-2576
123+41.42 EARTH							
706	600	Excavation	157.17	233	198	0.85	
3067	3067	Fill	10.22	89	89	1.00	-2467
123+50.00 EARTH							
756	642	Excavation	157.01	50	42	0.85	

3069	3069	Fill	1.94	2	2	1.00	-2427
124+00.00 EARTH							
1046	889	Excavation	156.41	290	247	0.85	
3072	3072	Fill	1.35	3	3	1.00	-2183
124+06.28 EARTH							
1082	920	Excavation	153.94	36	31	0.85	
3072	3072	Fill	1.05	0	0	1.00	-2152
124+50.00 EARTH							
1322	1124	Excavation	142.71	240	204	0.85	
3073	3073	Fill	0.00	1	1	1.00	-1949
124+61.42 EARTH							
1380	1173	Excavation	130.84	58	49	0.85	
3073	3073	Fill	0.00	0	0	1.00	-1900
124+68.15 EARTH							
1412	1200	Excavation	127.61	32	27	0.85	
3073	3073	Fill	0.00	0	0	1.00	-1873
125+00.00 EARTH							
1557	1323	Excavation	117.37	145	123	0.85	
3073	3073	Fill	0.00	0	0	1.00	-1750
125+23.28 EARTH							
1641	1395	Excavation	78.06	84	72	0.85	
3073	3073	Fill	0.00	0	0	1.00	-1678
125+50.00 EARTH							
1707	1451	Excavation	55.22	66	56	0.85	
3073	3073	Fill	0.00	0	0	1.00	-1622

125+88.15 EARTH						
	Excavation	32.15	62	52	0.85	
1769	1503					
	Fill	0.00	0	0	1.00	-1570
3073	3073					

↑	G R A N D		S U M M A R Y		T O T A L S	
	Material Name	Unadjusted	Adjusted	Mult		
		Volumes	Volumes	Factor		
		(cu. yd.)	(cu. yd.)			

EARTH

Excavation	1769	1503	0.85
Fill	3073	3073	1.00

↑	S P L I T	S U M M A R Y	T O T A L S
---	-----------	---------------	-------------

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH

	Excavation	1769	1503	0
0 0.85				
	Fill	3073	3073	0
0 1.00				

Input File: ewkprj.inp

Output File: Earthwork_ButternutRidge.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1   48   48           lvname = DESIGN - EARTHWORK - Shapes
1   49   49           co = 1
1   50   50           wt = 0
1   51   51           lc = 0
1   52   52           Stratify Shape Color
1   53   53
1   54   54       combine common exc + subgrade exc + subsoil exc
1   55   55
1   56   56
1   57   57       Add Accumulated Adjusted Volume Column
1   58   58
1   59   59       Add Accumulated Unadjusted Volume Column
1   60   60
1   61   61       Calculate Only Between Excavation Limits
1   62   62
1   63   63       End Area Decimal Places = 2
1   64   64
1   65   65       write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_BeatyEarthwork.txt
1   66   66
1   67   67       column 1 formula = abs( ["Earth", Common Exc, End Area] +
1   68   68           ["TopSoil", Common Exc, End Area] )
1   69   69       column 1 number of decimal place = 0
1   70   70       column 1 total length = 10
1   71   71
1   72   72       column 2 formula = abs( ["Earth", Fill, End Area] )
1   73   73       column 2 number of decimal place = 0
1   74   74       column 2 total length = 10
1   75   75
1   76   76
1   77   77       Process Earthwork for Baseline = BUTTER_PR
1   78   78           job number = 2F4
1   79   79
1   80   80           beg sta = 126+00.00 R 1
1   81   81           end sta = 130+24.00 R 1
0    0    82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = BUTTER_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol		(sq. ft.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

126+12.20 EARTH

0	0	Excavation	44.52	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0
126+50.00 EARTH							
70	60	Excavation	55.64	70	60	0.85	
1	1	Fill	0.92	1	1	1.00	59
126+90.63 EARTH							
149	127	Excavation	48.76	79	67	0.85	
4	4	Fill	3.42	3	3	1.00	123
127+00.00 EARTH							
166	142	Excavation	51.49	17	15	0.85	
5	5	Fill	4.87	1	1	1.00	137
127+12.20 EARTH							
190	163	Excavation	56.02	24	21	0.85	
7	7	Fill	4.91	2	2	1.00	156
127+47.25 EARTH							
275	235	Excavation	74.98	85	72	0.85	
13	13	Fill	3.65	6	6	1.00	222
127+50.00 EARTH							
283	242	Excavation	76.82	8	7	0.85	
13	13	Fill	3.38	0	0	1.00	229
127+68.82 EARTH							
341	292	Excavation	90.32	58	50	0.85	
15	15	Fill	1.41	2	2	1.00	277
128+00.00 EARTH							
464	396	Excavation	121.87	123	104	0.85	

16	16	Fill	0.00	1	1	1.00	380
----	----	------	------	---	---	------	-----

128+47.25 EARTH							
725	617	Excavation	175.86	261	221	0.85	
16	16	Fill	0.00	0	0	1.00	601

128+50.00 EARTH							
743	632	Excavation	178.96	18	15	0.85	
16	16	Fill	0.00	0	0	1.00	616

129+00.00 EARTH							
1212	1031	Excavation	327.56	469	399	0.85	
16	16	Fill	0.00	0	0	1.00	1015

129+50.00 EARTH							
1759	1496	Excavation	262.75	547	465	0.85	
16	16	Fill	0.00	0	0	1.00	1480

130+00.00 EARTH							
2206	1876	Excavation	220.16	447	380	0.85	
16	16	Fill	0.00	0	0	1.00	1860

130+24.00 EARTH							
2505	2130	Excavation	452.13	299	254	0.85	
16	16	Fill	0.00	0	0	1.00	2114

↑	G R A N D		S U M M A R Y		T O T A L S		
	Material Name		Unadjusted	Adjusted	Mult		
			Volumes	Volumes	Factor		
			(cu. yd.)	(cu. yd.)			

	EARTH						
		Excavation	2505	2130	0.85		
		Fill	16	16	1.00		
↑	S P L I T		S U M M A R Y		T O T A L S		

Quant	XS Quant	XS Quant	Add/Sub Quant	Add/Sub
-------	----------	----------	---------------	---------

		Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult			Volume	Volume	Volume	Volume
Factor			(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

-----		EARTH				
		Excavation	2505	2130		0
0	0.85					
		Fill	16	16		0
0	1.00					

Input File: ewkprj.inp

Output File: Earthwork_Lowe.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1  48  48          lvname = DESIGN - EARTHWORK - Shapes
1  49  49          co = 1
1  50  50          wt = 0
1  51  51          lc = 0
1  52  52          Stratify Shape Color
1  53  53
1  54  54          combine common exc + subgrade exc + subsoil exc
1  55  55
1  56  56
1  57  57          Add Accumulated Adjusted Volume Column
1  58  58
1  59  59          Add Accumulated Unadjusted Volume Column
1  60  60
1  61  61          Calculate Only Between Excavation Limits
1  62  62
1  63  63          End Area Decimal Places = 2
1  64  64
1  65  65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_AtkinsEarthwork.txt
1  66  66
1  67  67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1  68  68          ["TopSoil", Common Exc, End Area] )
1  69  69          column 1 number of decimal place = 0
1  70  70          column 1 total length = 10
1  71  71
1  72  72          column 2 formula = abs( ["Earth", Fill, End Area] )
1  73  73          column 2 number of decimal place = 0
1  74  74          column 2 total length = 10
1  75  75
1  76  76
1  77  77          Process Earthwork for Baseline = LOWE_N_PR
1  78  78          job number = 2F4
1  79  79
1  80  80          beg sta = 140+50.00 R 1
1  81  81          end sta = 142+50.00 R 1
0   0   82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = LOWE_N_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

140+50.00 EARTH

0	0	Excavation	352.94	0	0	0.85	
0	0	Fill	0.00	0	0	1.00	0

141+00.00 EARTH							
458	389	Excavation	141.37	458	389	0.85	
0	0	Fill	0.00	0	0	1.00	389

141+50.00 EARTH							
631	536	Excavation	45.25	173	147	0.85	
22	22	Fill	23.28	22	22	1.00	514

142+00.00 EARTH							
702	596	Excavation	31.21	71	60	0.85	
65	65	Fill	23.01	43	43	1.00	531

142+41.00 EARTH							
748	635	Excavation	29.99	46	39	0.85	
90	90	Fill	9.34	25	25	1.00	545

↑	G R A N D		S U M M A R Y		T O T A L S		
	Material Name		Unadjusted	Adjusted	Mult		
			Volumes	Volumes	Factor		
			(cu. yd.)	(cu. yd.)			

	EARTH						
		Excavation	748	635	0.85		
		Fill	90	90	1.00		
↑		S P L I T	S U M M A R Y	T O T A L S			

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH					
		Excavation	748	635	0

0 0.85

Fill

90

90

0

0 1.00

Input File: ewkprj.inp

Output File: Earthwork_DiddenLoop.log

```
1 1 1
1 2 2
1 3 3 Earthwork
1 4 4
1 5 5 tolerance = 0.010000
1 6 6
1 7 7 vertical search distance = 250.000000
1 8 8
1 9 9 xs dgn = P:\2009
Projects\09-05-201\Transportation\Sideroad_Earthwork.dgn
1 10 10
1 11 11 Proposed Finish Grade
1 12 12 soil type = Earth
1 13 13 roadway exc mult factor = 0.850000
1 14 14 subsoil exc mult factor = 1.000000
1 15 15 fill mult factor = 1.000000
1 16 16 type = line, line_string
1 17 17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1 18 18 co = 2,8
1 19 19
1 20 20 Existing Ground Line
1 21 21 soil type = Earth
1 22 22 roadway exc mult factor = 0.850000
1 23 23 subsoil exc mult factor = 1.000000
1 24 24 fill mult factor = 1.000000
1 25 25 type = line, line_string
1 26 26 lvname = SURVEY - GROUND - Top of Ground
1 27 27 lc = 3
1 28 28 co = 0
1 29 29
1 30 30 Existing Unsuitable Material
1 31 31 soil type = TopSoil
1 32 32 roadway exc mult factor = 1.000000
1 33 33 subsoil exc mult factor = 1.000000
1 34 34 fill mult factor = 1.000000
1 35 35 type = line, line_string
1 36 36 lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1 37 37 lc = 2
1 38 38 co = 2
1 39 39
1 40 40 Excavation Limit
1 41 41 type = line
1 42 42 lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1 43 43 co = 0
1 44 44
1 45 45 Write Earthwork Shapes
1 46 46 plot param
1 47 47 lv = 347
```

```

1    48    48          lvname = DESIGN - EARTHWORK - Shapes
1    49    49          co = 1
1    50    50          wt = 0
1    51    51          lc = 0
1    52    52          Stratify Shape Color
1    53    53
1    54    54          combine common exc + subgrade exc + subsoil exc
1    55    55
1    56    56
1    57    57          Add Accumulated Adjusted Volume Column
1    58    58
1    59    59          Add Accumulated Unadjusted Volume Column
1    60    60
1    61    61          Calculate Only Between Excavation Limits
1    62    62
1    63    63          End Area Decimal Places = 2
1    64    64
1    65    65          write column base ascii file = P:\2009
Projects\09-05-201\Transportation\SR28_AtkinsEarthwork.txt
1    66    66
1    67    67          column 1 formula = abs( ["Earth", Common Exc, End Area] +
1    68    68          ["TopSoil", Common Exc, End Area] )
1    69    69          column 1 number of decimal place = 0
1    70    70          column 1 total length = 10
1    71    71
1    72    72          column 2 formula = abs( ["Earth", Fill, End Area] )
1    73    73          column 2 number of decimal place = 0
1    74    74          column 2 total length = 10
1    75    75
1    76    76
1    77    77          Process Earthwork for Baseline = DIDDEN_LOOP_PR
1    78    78          job number = 2F4
1    79    79
1    80    80          beg sta = 150+50.00 R 1
1    81    81          end sta = 154+87.96 R 1
0     0     82 END_OF_FILE

```

COMPUTING EARTHWORKS FOR BASELINE = DIDDEN_LOOP_PR

COMPUTING EARTHWORKS FOR JOB = 2F4

FORMING LIST OF XSCELLS

BEGINNING EARTHWORKS COMPUTATION

↑

	Material Name	End Areas	Unadjusted	Adjusted	Mult	Mass	Accum
Station	Accum		Volumes	Volumes	Factor	Ordinate	Unadj
Vol	Adj Vol						
		(sq. ft.)	(cu. yd.)	(cu. yd.)			(cu.
yd.)	(cu. yd.)						

150+65.00 EARTH

0	0	Excavation	33.68	0	0	0.85	
0	0	Fill	0.09	0	0	1.00	0
150+80.96 EARTH							
21	18	Excavation	38.30	21	18	0.85	
0	0	Fill	0.02	0	0	1.00	18
151+00.00 EARTH							
56	48	Excavation	61.83	35	30	0.85	
0	0	Fill	0.00	0	0	1.00	48
151+50.00 EARTH							
357	304	Excavation	263.21	301	256	0.85	
0	0	Fill	0.00	0	0	1.00	304
152+00.00 EARTH							
1217	1035	Excavation	666.00	860	731	0.85	
0	0	Fill	0.00	0	0	1.00	1035
152+50.00 EARTH							
2859	2431	Excavation	1107.65	1642	1396	0.85	
0	0	Fill	0.00	0	0	1.00	2431
152+96.46 EARTH							
5155	4383	Excavation	1561.59	2296	1952	0.85	
0	0	Fill	0.00	0	0	1.00	4383
153+00.00 EARTH							
5362	4559	Excavation	1594.68	207	176	0.85	
0	0	Fill	0.00	0	0	1.00	4559
153+24.31 EARTH							
6840	5816	Excavation	1689.03	1478	1257	0.85	

0	0	Fill	0.00	0	0	1.00	5816
153+50.00 EARTH							
8096	6884	Excavation	951.22	1256	1068	0.85	
0	0	Fill	0.00	0	0	1.00	6884
153+93.96 EARTH							
9420	8010	Excavation	675.61	1324	1126	0.85	
0	0	Fill	0.00	0	0	1.00	8010
154+00.00 EARTH							
9572	8139	Excavation	684.40	152	129	0.85	
0	0	Fill	0.00	0	0	1.00	8139
154+50.00 EARTH							
10821	9200	Excavation	664.08	1249	1061	0.85	
0	0	Fill	0.00	0	0	1.00	9200
154+87.96 EARTH							
11647	9902	Excavation	511.00	826	702	0.85	
0	0	Fill	0.00	0	0	1.00	9902

↑	G R A N D		S U M M A R Y		T O T A L S		
	Material Name		Unadjusted	Adjusted	Mult		
			Volumes	Volumes	Factor		
			(cu. yd.)	(cu. yd.)			

	EARTH						
		Excavation	11647	9902	0.85		
		Fill	0	0	1.00		
↑	S P L I T		S U M M A R Y		T O T A L S		

Quant		XS Quant	XS Quant	Add/Sub Quant	Add/Sub
	Material Name	Unadjusted	Adjusted	Unadjusted	Adjusted
Mult		Volume	Volume	Volume	Volume
Factor		(cu. yd.)	(cu. yd.)	(cu. yd.)	(cu. yd.)

EARTH					
		Excavation	11647	9902	0
0	0.85				
		Fill	0	0	0
0	1.00				